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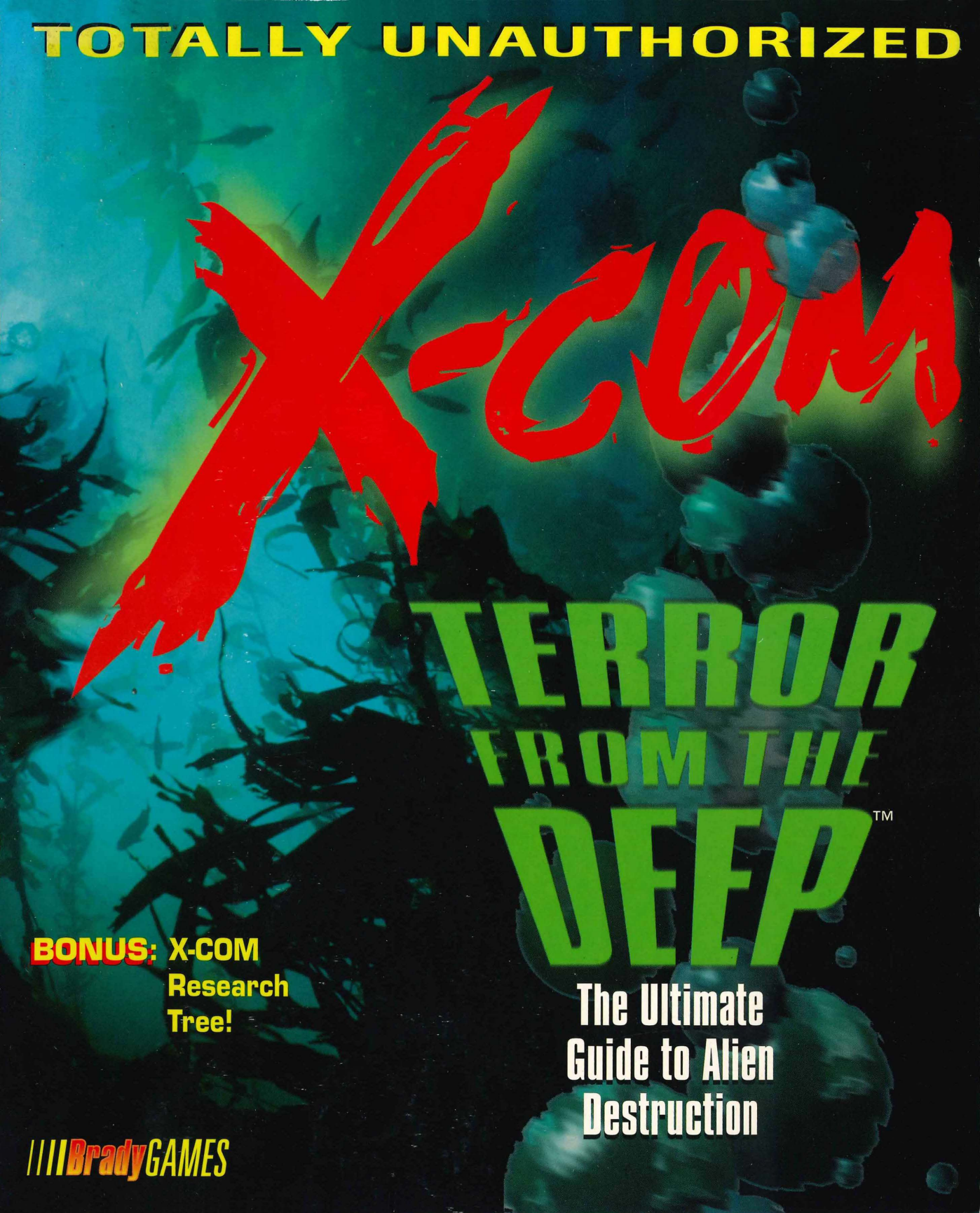

X-COM

TERROR FROM THE DEEP™

BONUS: X-COM Research Tree!

The Ultimate Guide to Alien Destruction

BradyGAMES

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X-COM

TERROR FROM THE DEEP™

The Ultimate Guide to Alien Destruction

BradyGAMES

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About Bernie Dy

Bernie Dy is a programmer and freelance writer currently based in Houston, TX. He is a successful graduate of the X-COM weight loss plan, but warns prospective adopters of a special side effect: sleep deprivation.

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To my folks, who put me here; to my sister, who balances me; and to Jeff James and his wife Dawn for doing most of the work, assembling our team, and making a special sacrifice for the project.

A Note from the X-COM Files

The year is 2055. The battles between the X-COM forces and the aliens have long since passed and the world is settling into more peaceful times.

Recently, however, our citizens were viciously thrust back in the midst of those terrible days. A renowned historian uncovered some private notes kept by a seaman of the X-COM forces. The notes chronicled a brief stint in the life of one particular member of the X-COM forces, and the battles he undertook.

The unedited account of one X-COM soldier follows.

In space, so they say, no one can hear you scream. That's clearly not true underwater, thought Lieutenant Benjamin Talbot III as he examined the comm unit inside the helmet that a moment ago had been locked onto his armored suit. He made a mental note to advise the techies to increase the amplitude compression in the units so that an aquanaut would be less—what was the proper word? "Distracted" wasn't quite right—by the decibel level of a comrade's piercing scream as his helmet imploded from an alien weapon strike.

Talbot breathed deeply for the first time since removing his helmet. The air in the Triton flying sub was laced with the distinct metallic smell that always followed the release of the compressed air that had not yet finished pushing the salt water back into the surrounding depths. Mixed with the scent of the air was the briny odor of the sea, the plastic aroma of his aqua armor and the perfume of his own perspiration. As Talbot pushed back his hair, he realized it was soaking wet. Evidence of what? His exertion? Or his fear?

His squad ("his" because Lieutenant Talbot was the ranking aquanaut in the group) had just completed a successful recovery of a small alien sub. Success was measured by the fact that no aliens were left behind and that the Triton would be bringing back sufficient booty to be sold on the black market to help pay the bills in a world where you could never know when a funding country might reduce its support or drop out altogether after signing a treaty with the aliens.

The fact that forty percent of the squad had been decimated in the raid did not diminish the action's "success" in the collective mind of X-COM's administration. There were always fresh recruits to replace the blood spilled on the ocean floor.

Grimly, the Lieutenant reminded himself that he shared responsibility for whatever heartlessness he blamed on the administration. Like a good officer, he followed standard operating procedure, which entailed among other things, sending the least prepared—and most expendable—rookie seamen in advance of the squad to scout and draw enemy fire. And despite their visible fear, these rookies obeyed his orders willingly, almost lovingly, eager to be heroes. Perhaps each expected a ticker-tape parade down Broadway in his honor when he returned victoriously, or at the very least a statue in a small park in his home town to commemorate the life that he had sacrificed for his species. Talbot himself had no need to be a hero. There was enough of that in his family history to last for generations.

Talbot's personal contribution to the success of the mission was the capture of a live "Deep One," as the haunting creatures had come to be known. To his knowledge, no live Deep One had yet been brought back to base for interrogation.

Interrogations of live aliens invariably produced valuable information. In the endless juggling of resources peculiar to an underfunded organization like X-COM, space in the alien containment facilities was limited. When an interrogation was completed, a unit of space was magically freed up for the arrival of other prisoners. Talbot often wondered, but never asked, what methods were used to make an alien talk and what happened to the alien after he had no more data to divulge.

His Deep One was now in a stunned state, packed horizontally in the Triton's small alien containment facility together with the corpses of several of the Tasoth, the yellowish lizard-like species that had earned the nickname "San Diego Chicken." He didn't understand the reference, and nobody was able to explain it to him either, but the moniker had stuck.

Talbot studied the Deep One's visage, and found its face to be completely opaque to his probing. Usually, the soul of a being is found through its eyes, thought Talbot, but with this being, he could find no soul. Nor had he seen any spark of a soul when he first had encountered the Deep One, waiting for him in ambush around the corner of a steep coral escarpment rising in the gloom of the deep.

It had been almost too easy. A brilliantly bright incendiary blast from another corner of the battlefield had cast the Deep One's shadow in the sand, revealing his location. Talbot hefted his gas cannon, loaded with armor piercing bolts, turned the corner and fired swiftly at the waiting alien, who had either been too distracted by the previous blast to pay attention to his station or simply did not have the reflexes to match Talbot's.

In the moment before he had fired, Talbot had gazed into the face of his quarry, searching for the eyes, and he saw—nothing. His shot knocked the alien lifeless to the sand. Reaching down to pick the booty off the body, Talbot realized that the creature had not died. That was an unexpected but welcome accident. He hefted the Deep One into his backpack and headed back towards the Triton.

Now, back at the Triton awaiting liftoff, the lieutenant glanced at each surviving member of his squad, all of whom appeared to be at least as exhausted as himself. In these moments, silence was always the unwritten rule, as each aquanaut privately flushed the adrenaline from his or her blood, quenched internal fires of emotion and invariably lapsed into sleep for the ride back to base. Zander, predictably, was already snoring.

The pneumatic pumps became silent as the last of the brine was pushed back into the depths. Seconds later, the Triton's engines awakened with a deep thrumming,

and immediately the flying sub lifted off bottom, inclining steeply towards the surface. It was not long before the vehicle was airborne, heading back to South Atlantic Base.

For the four hundredth time, Talbot asked himself how he had gotten himself in this position. The answer was always the same. Destiny and genes. All of his life pointed him to this circumstance, as well as the lives of those in his family before him.

Some people believe that destiny is written in a mysterious book in which some guiding force enters all the events that have happened and are yet to be. Talbot had a different view. He suspected that destiny was written down in each soul's genetic code, hidden in some bend or spiral in a way which no human cryptographer would ever decipher.

It was natural for Talbot to think in these terms, for he was trained to think in terms of genes. His expertise, when he wasn't fighting aliens, was in transgenetics, the science of splicing and dicing genes, combining them in new ways to discover the effects of the combinations. This was a respected science that owed its roots to the late twentieth century, when scientists first grafted human growth hormone into mice to create a "super mouse."

Talbot smiled as he recalled the graduation party thrown for him by his parents after he had earned his Ph.D. They had bought him a snappy red convertible sportster to celebrate the end of his studies and the commencement of his days as a productive member of human society. A buffoonish friend of his father had cornered him in the den, punctuating his words with a smelly cigar. He said, "Benjamin. I have one word for you: Plastics!" At the time, Benjamin Talbot had politely listened, without bothering to tell the plastics industrialist that seven pharmaceutical firms were in a bidding war for his loyalties.

His smile erupted into an involuntary chuckle as he fondly stroked the plastic of his armored suit. The old geezer probably had a requirements contract with X-COM to supply the organization with all its plastic aqua-armor. The morbid in-joke about the plastic suits was that they actually made the standard issue medi-kits more effective, not because they improved the healing properties of the kits but because the medi-kits were useless to revive a dead, unarmored aquanaut.

If only the weapons we had were better, Talbot thought. In the last alien war (AW I, as it was now called, to distinguish it from the present AW II), scientists had copied from captured alien weapons the wonderfully effective plasma weapons and the devastating blaster bomb launcher. Today, all of these were outlawed. What had

not been known at the time of AW I was how severely damaging Elerium-based weapons were to the environment and to the health of the general population. The lawsuits from the X-COM veterans and their families as well as from the general public brought about a tremendous expense that had never been budgeted by X-COM or its benefactors. Elerium and Elerium-based weapons were banned throughout the world. AW II would have to be fought with environmentally safe weapons.

What frustrated Talbot more than his unhappiness with the weaponry was the fact that this new breed of aliens was completely immune to mind control. The tide of AW I turned in favor of the humans only when scientists developed the ability to train soldiers to amplify and focus their brain power for the purpose of causing an alien to panic or to obey the commands of the controller.

With the close of AW I, the science of mind control continued, and schools in the mental martial arts stole big business away from the dojos of the traditional martial arts. Talbot himself held a third degree black belt in mind control, but his skills were useless against an enemy that did not have a mind, as a mind is normally understood.

These aliens, the scientists were beginning to understand, were not normal races of beings. Discovery after discovery was leading the scientists to come to the conclusion that most if not all of these aliens were half-breeds, clones, grafts and mutations, some based on captured human stock. Talbot understood much about the science required to perform such magic. He wondered how the war would fare if the humans had a mutation technology of their own.

In creating these abominations, the alien powers-that-be had no concern with allowing the being to retain a mind. All that was important was to create a fighting machine that would kill well and obey its superiors through some as-yet undiscovered method of communication.

There had to be a way to find something comparable to mind control. If that did not happen, Talbot believed that the human race would ultimately lose this war. He stole a glance at his Deep One guest. Perhaps interrogation of this soulless devil would offer up a clue.

Unavoidably, the weight of Talbot's eyelids overcame the waning strength of the overmatched muscles to which they were attached. He chose not to fight, leaned his head back against the cold metal of the Triton's wall and dreamt a dream that he knew quite well.

He was his grandmother, famous Helen White, hero of AW I, 40 years ago. The first act of the dream always took place in what he knew to be China Base, a backwater installation serving more as a radar post than for combat purposes. Helen (or Benjamin—the faces kept switching in the dream) was one of three untested rookies at the base. The base was under attack by Sectoids armed with heavy plasma and blaster launchers. The three rookies had laughable laser rifles in comparison. They feared their imminent death. The dream turned to a flurry of violent activity, with emotions and fears twisting within the dreamer to accompany the action displayed on his internal movie screen of sleep. One of the rookies succumbed to panic, leaving the battle screaming. The remaining two battled frantically, and with remarkable tactics picked off Sectoid after Sectoid. When the battle was apparently over, there was still a hint of hidden movement, but the panicked soldier who was now just recovering his wits caught the remaining Sectoid wandering the halls of the base.

The dream dissolved into Act Two, the final raid on Cydonia. The mind-controlled mental weakling from China Base had been transferred to administration and as a welcome favor to an old, dear friend arranged for Helen's transfer to the away team. She was warmly welcomed by her new comrades. Her actions in China had already become legend among the X-COM soldiers. She was a grunt's hero.

In the Cydonia alien base, Helen/Benjamin was assigned to guard the PSI-team and to relay to them coordinates of sighted aliens for their mind control attacks. The mission was going easily. The squad was advancing methodically in search of the alien mastermind. Their combined skills were too much for the aliens. The aliens never got off a shot as they were successively sighted, mind controlled, and then turned into "doggies," the name the soldiers gave to mind-controlled aliens kept on an invisible leash to be walked down dark corridors as combination scout and cannon fodder.

As the advance crew drew near to the triumphant conclusion of the mission, Helen heard a deafening explosion. Then a frantic plea was radioed to her directly from Commander Yakubik: "Blaster bomb just caught two in the corridor around the bend. Best guess is we screwed up and didn't unearth all aliens in your sector, Sergeant. Whatever it is may be coming your way. Get it!"

Helen/Benjamin set her heavy plasma on auto-shot and, after acknowledging the good luck gestures of the eggheads she was supposed to be guarding, headed in search of unknown quarry. It didn't take long. It was the smoky trail from the blaster launcher missile that lead her to her prey. There was the Ethereal in a corner behind a bulky alien fixture, his blaster launcher still smoking. You would have to be in just the right position and standing in just the right direction to spot him. She could understand how the advance team had missed him, and she forgave them.

She was close enough to see into the shadows of the Ethereal's golden cowl, and she picked out the alien's small but expressive eyes. The alien made no move to defend itself. Maybe its launcher was jammed, maybe it had no more ammunition. In its eyes and posture, Helen/Benjamin saw an attitude of relaxed acceptance. She fired, and the first of the three auto-shots found its mark. She paused over the corpse and examined the blaster launcher. It was fully loaded and completely operational. She wondered why it happened this way, and she had no answer.

"Got it, Commander," Helen/Benjamin crowed over the telcomm unit.

"Come here, Sergeant. We have a surprise for you." She could hear the smile in his voice. When she arrived, she was met by two soldiers who escorted her in a jovial manner to the access lift. At the second level, a line of soldiers blocked her view to the interior of the great hall. All were grinning joyously.

"We took a vote," said the Commander, "on who would get the kill on this one." The line of soldiers parted to reveal the huge alien brain. "You won."

"With great pleasure, sir." Without hesitation, Helen/Benjamin lifted her heavy plasma once again. In seconds, the great alien brain was turned into a mass of scorched sweetbreads.

She could hardly maintain her balance from all of the heavy congratulatory slams on the back. A warm can of beer was being passed around. She wondered who had the audacity to smuggle a beer to Mars. Everyone was applauding her. She was thankful that nobody thought to cut off a piece of the brain and eat it in a demonstration of warrior's victory.

"Sergeant White," said the Commander, "I now christen you the one and only hero of this war," and he proceeded to pour the few remaining drops of warm beer over her braids. And with this action, bright lights flashed around her, blinding her eyes. Photographers? How did the press get to Mars?

The heavy kerchunk of the Triton's doors completed the intrusion into Lieutenant Benjamin Talbot's dream. The lights were the bright fluorescence of the sub pen of South Atlantic Base. The illumination was always excruciatingly painful after being confined for hours in the dim light of the flying sub and the murkiness of the ocean floor.

Grandma. How he had loved her. She was indeed the hero of the war, a regular icon. The whole world loved her, but only he and his cousins could call her Grandma.

As a child, he always believed that she loved him the best. She would regale him with stories of her X-COM exploits, stories that had been told and retold countless times in the press as well as in the authorized and several unauthorized biographies. The difference for him was that she shared her whole being with him, and with each retelling he was transported with her to a place and time far away.

He felt quite differently about his slimeball grandfather, Benjamin Talbot, Sr. (Of course the "Sr." was not added until the son Benjamin Talbot, Jr. was born and named.) Ben Talbot, Sr. was the mental weakling from China Base who successfully wooed Grandma following the war. The two of them made a grand, storybook couple who always remained in the eyes of the public. They became rich.

At some point, however, an enterprising cub reporter digging into X-COM archives discovered some inconsistencies and irregularities in administration accounting. Benjamin Talbot, Sr. was accused of having received kickbacks from black marketers on the sale of lucrative laser cannons during the war. He was tried for the offense and acquitted for lack of evidence.

The government then turned to its most stolid legal weapon, one which had been used for decades against its targets: tax evasion. The government was able to prove that Ben Talbot, Sr.'s net worth had increased markedly during the war years, and he could not point to any gift, inheritance or other reported source of income to explain the change. Unable to offer an explanation for his increased

wealth, the government proved to the satisfaction of a jury that the famous Ben Talbot, Sr. had failed to report massive amounts of income. He had to pay back taxes, interest, and penalties that ran into millions of dollars, and he spent two years in jail to boot. Photographs from his sentencing showed the face of an unconcerned defendant, leading Lieutenant Benjamin Talbot III to conclude that his grandfather had gotten off with too light a sentence.

For this reason, the Lieutenant had always been uncomfortable with family money. He rejected the offers of support for his education and went to college on a scholarship with the Reserved Officers Training Corps. He had excelled in his schooling and in his officer's training. His fellow ROTC cadets kidded him that he had his father's eyes, his mother's hands, and his grandmother's reaction times and firing accuracy.

It was two weeks after his Ph.D. graduation party that he had been called to honor his reserve commitment. After returning the handset to its cradle, he sat in meditation for almost an hour before the phone jangled him back to material awareness. The caller was solicitous, but brief and direct. The cruise ship Hyperion had sunk on its maiden voyage. There were no survivors. His parents had been aboard. He was stunned, and had to draw himself together sufficiently to provide some sort of brief acknowledgment so that the caller could politely terminate the call and return to the next name on a long list to be notified.

The decision by the aliens to sink the Hyperion in a terrorist attack as the first announcement of their renewed presence on Earth was a propagandist's stroke of genius. The Hyperion, the first brand-new cruise liner built in the last ten years, was built in a retro-style that made it look stunningly like the Titanic, and its owners basked in the press that singled the ship out for its beauty as well as its functionality. Before its maiden voyage, the owners made no attempt to debunk the nickname of the "Unsinkable Hyperion." The attack occurred in the middle of the Atlantic crossing, timed for the moment that the press was providing a live feed of the Maiden Voyage Ball. It was one of those defining moments in live television that made viewers want to turn away in horror, but they could not. Over 1800 passengers, crew members, and media representatives died. Millions more were scarred by the live images of the rapidly sinking liner with those on board not having a chance in hell of survival.

As he strode into the bright lights of the sub pen from the Triton, Lieutenant Talbot acknowledged to himself that, like it or not, inheritance had made him a wealthy man. He could probably buy the island of Bermuda for himself as a refuge. He could probably turn his back on X-COM at the first opportunity and live a safer, saner life. But he had long ago understood that there was no refuge and no safer, saner life to be had, so long as this new alien menace remained. Besides, he found himself governed by one of the very strongest of human motivations: vengeance.

"Lieutenant Talbot, sir?" an Ensign awaited recognition. Talbot glimpsed the identification tag.

"Yes. What is it, Mr. Pulver?"

"Admiral Gunterow is here at the base to see you, sir. She ordered me to bring you to her as soon as you disembarked." This piqued Talbot's interest. Why would the Admiral, commander of western hemisphere operations, come here to see him?

"So be it. Lead the way."

In the Admiral's chambers, Talbot stood at attention as Helga Gunterow alternately studied him and a manila-colored file that she had open on her desk before her. She wrinkled her nose at him.

"At ease, Lieutenant. I know I told the Ensign to bring you here immediately, but I suppose it could have waited for you to get out of your stinking armor and take a shower."

Talbot shifted self-consciously, wondering how to stuff his body odor back into his suit.

"No matter," she said, closing the file. "Lieutenant, I need your help."

"Sir?"

"I don't know what to do with you."

"I don't understand, sir."

"I'm going to make you a proposition and let you make the decision of where your future will lead you. You will be in charge of your own destiny. It's a luxury that is given to few in X-COM. Come to think of it, I don't know anybody else who has been given this kind of choice."

Talbot waited as the Admiral studied his face further. "You do look very much like your grandmother, you know."

After a pause she continued, "The point is this. You are our most highly qualified aquanaut. That is not intended as a compliment. It is a statement of fact. You also have another potential that could be very advantageous to X-COM and its fight against the aliens. But if we exploit that potential, it would be completely inconsistent with your continuing in a combat role."

"Admiral, if I may interject?" Talbot waited for the Admiral's nod of permission. "If it is up to me, I have no desire whatsoever to trade on my face and my name to be a public relations specialist for X-COM. I am not qualified to deal with either the media or with heads of state."

"You're jumping the gun, Lieutenant. Although you pose an interesting third alternative, that's not what I have in mind. You consider yourself an expert 'splicer and dicer', don't you?"

"Yes, sir. You're referring to my transgenetics degree."

"Yes, I am. You see, our scientists have determined that the aliens that we are confronting are genetic monstrosities, pasted together by an alien intelligence possessing a highly advanced mutation technology."

"I am aware of this finding, Admiral."

"Good. I thought it would be something that you would follow. Our scientists have asked for additional staff and funding to embark on a research effort that could deliver this mutation technology into our own hands. This could be an extraordinary weapon in our favor. Do you understand the thinking on this?"

"The thought has crossed my own mind more than once, Admiral."

"My staff determined that you would be a prime candidate for the heart of that effort. Here's the deal. You can join the research team and maybe, just maybe, you'll hit upon a viable technology that can help us win this war. Alternatively, you can remain on combat duty. Either way, I have a no-lose situation: I either retain a great aquanaut or I gain a great mind."

"You could look at it as a no-win situation, too, Admiral. You either lose a great aquanaut or you fail to gain a great mind."

"Good point," the Admiral laughed. "Will you consider it, please?" Talbot nodded. "When do you think I can have your decision?"

"May I have an hour for a shower and meditation?"

"Certainly. Dismissed, Lieutenant."

As he approached the door, Admiral Gunterow called to him. "Either way you decide, you could be the hero of this war, like your Grandmother before you. Funny how destiny works out, isn't it?"

"With all due respect, Admiral, we don't need another hero," Talbot responded, and he quietly shut the door behind him.

1

X-COM Exposed

What Is X-COM: Terror From The Deep?

X-COM: Terror From The Deep is the sequel to the hugely successful X-COM: UFO Defense, which was developed by Mythos Games and released by MicroProse in the Spring of 1994. Like the original X-COM, Terror From The Deep places you in command of an "Extraterrestrial Combat Unit" (X-COM for short), a special organization created to thwart the evil schemes of aliens intent on conquering the Earth. As commander of X-COM, you have a wide variety of resources at your disposal.

You can build up to eight bases on Earth, design the floor plans, and then populate those bases with the scientists, technicians and soldiers that will drive your war effort. Using your scientists you can delve into the secrets of alien technology, which allows you to create more advanced and powerful weapons, equipment, and vehicles. Your technicians can then manufacture the devices that your scientists have researched and discovered. Finally, your soldiers must take the fight to the enemy, and engage the alien soldiers wherever they may appear.

Combat takes a variety of forms in Terror From The Deep. As alien subs are spotted, you must launch interceptors to pursue, engage, and shoot down the alien invaders. After you've shot down a submarine, you must then send in your soldiers to search the crash site, and then kill or capture any aliens you encounter. Aliens may even terrorize innocent civilians in port cities, on cruise liners, and in secluded island resorts—regardless of the locale, you must be quick to confront the aliens wherever they appear.

Eventually, you must seek out the aliens in their undersea bases and colonies, and systematically eradicate the alien menace from the Earth. Do your job too well, however, and the aliens may start an assault on your bases in an attempt to put X-COM out of action.

During all this activity you must keep the countries that fund the X-COM project satisfied with your performance. X-COM exists thanks to the funding of a wide range of nations, and those nations expect their territories to be kept free of alien influence. Do poorly in a certain sector of the world, and the effected countries may reduce their funding. Continue to do poorly and those same countries may withdraw from the X-COM project altogether and sign a pact with the aliens, thus eliminating their funding.

Differences Between X-COM: UFO Defense and X-COM: Terror From The Deep

Whereas the original X-COM required players to engage and eliminate aliens detected on land, in the air, and even in space (in the final mission to Cydonia, the alien base on Mars), Terror From The Deep takes place in the murky, lightless depths of the world's oceans.

After the aliens in the original X-COM were defeated, they sent a coded message to their brethren, an ancient army of creatures which had slept for eons beneath the seas of the

Earth. To represent the underwater setting, Terror From The Deep uses graphics that represent undersea coral reefs, ship wrecks, and other features. All the weaponry, equipment, armor, and vehicles are designed for underwater use, even though some missions—most notably terror sites—take place above ground. In addition, Terror From The Deep features "linked" missions, which allows for much larger alien bases, terror sites, and other locations. Besides a few minor interface enhancements (and a revised installation utility), veteran X-COM commanders will immediately feel right at home.

Game Availability

Terror From The Deep is currently available for the IBM PC and IBM PC CD-ROM formats. According to a MicroProse UK spokesperson, Terror From The Deep will only be released for the IBM and compatibles. The game is widely available in North America, the United Kingdom, Germany, and Australia. TFTD can be installed using one of four languages (English, Spanish, French, or German), so distribution to other countries using those languages should be forthcoming. The game is widely available in North America and in the United Kingdom. The first version of X-COM was dubbed "UFO: Enemy Unknown" in the United Kingdom. To eliminate confusion due to two different names for the same product, X-COM: Terror From The Deep is the name used to describe the game in all markets.

Terror From The Deep System Requirements

Terror From The Deep requires the following:

- IBM or compatible PC with a 386, 486, or Pentium processor
- MS-DOS 5.0 or higher
- 4 MB RAM
- VGA graphics
- Mouse
- 15 MB hard disk space (Floppy version)
- 4 MB hard disk space (CD-ROM version)

For more information on program installation and system requirements—including the "Do's" and "Don'ts" of running Terror From The Deep with other operating systems such as Novell DOS, OS/2, and Microsoft Windows—turn to Chapter 12, "Troubleshooting."

Does Terror From The Deep Offer Support for Multiple Players?

Sadly, no. Some players have been known to take turns at the same computer sharing game responsibilities. For example, one player may be in charge of all the manufacturing, research and base operations, while another handles the tactical combat sections.

X-COM squaddies hoping for true multi-player support will have to wait until the next X-COM product—X-COM 3—is released sometime in 1996.

What You'll Find in This Book

The heart of TFTD is undoubtedly the tactical combat portion: If you can't win battles on the ground with your soldiers, you simply can't win the game. Because of the importance of tactical combat, this book concentrates most heavily on providing battle-tested tactics and strategies for keeping your soldiers alive and quickly achieving your objectives. Some of the information on tactics—especially in Chapter 6—is loosely based on concepts that real-world infantry commanders use to command their troops.

Book Layout

If you're a TFTD novice, reading the chapters in order will give you the most benefit. Of special importance to the gaming novice are Chapters 11 and 12, which provide information on game utilities and game troubleshooting, respectively.

However, if you're an expert X-COM commander who is looking for some more advice, tips, and strategies on the tactical combat portion of the game, you can immediately jump to Chapters 5, 6, 7, and 8 for an exhaustive analysis of the tactics, weapons, and soldiers needed to beat the aliens at their own game.

Chapter 9 discusses alien artifact sites and T'leth, the "brain" city of the alien invaders. This chapter provides an in-depth look at the final battle of the game, so if you don't want to spoil the ending of the game you can skip this chapter. Chapter 10 provides an in-depth look at molecular control, an aspect of TFTD that deserves lengthy analysis and discussion.

Strategies and Advice

This book was written out of a desire to provide a valuable resource to TFTD gamers. More specifically, this book focuses on the game-winning strategies and tactics that will help you win the game. In many instances throughout this book, for example, you'll read chapters that offer suggestions and advice on how to succeed and do well at certain aspects of the game. Although the suggestions presented here have been proven to be effective in almost all cases—verified by hundreds of hours playing TFTD—they are only that: suggestions. Feel free to experiment with any of the ideas presented in this book and adapt them to your own style of play.

Difficulty Levels

When you begin a new game in TFTD, you can choose from one of five difficulty settings, ranging from Beginner (easiest) to Superhuman (most difficult). A higher difficulty setting makes aliens and alien submarines more aggressive, adds more aliens to tactical combat missions, and makes the aliens more skilled. This guide was written with the "Beginner" difficulty setting in mind. Why? TFTD is an order of magnitude more difficult than the original X-COM, and experienced gamers may find themselves initially challenged by even the easiest level in TFTD. Unless otherwise mentioned in the text, therefore, the information contained in this book is based upon the Beginner difficulty setting.

A Note About Maps

Throughout this book are several maps detailing a variety of locales in TFTD. Unfortunately, some locations in the game—most notably terror sites, aliens colonies and artifact sites—are randomly generated, at least to some extent. Therefore, the maps for the aforementioned locales are presented as examples only—they're not meant to be exact reproductions of what you'll encounter. However, TFTD seems to use and re-use certain structures in all of these randomly generated sites. For example, the warehouse used in all port terror site missions will be identical to the warehouse drawn on the port terror site map in Chapter 7 of this book. These structures may not be located in the same position in the game you're playing, but they should look the same.

All the other maps in this book should provide an accurate reproduction of what you'll encounter, most particularly the alien submarine maps in Chapter 7 and the maps of T'leth in Chapter 10.

Tips

Throughout this book, you'll frequently see this icon in a boxed area of text. This icon is used to introduce a wide range of game-busting tips and techniques that deserve special mention. Some consist of expert game advice, while others offer insight into game quirks, glitches, and other features that you can use to your advantage.

A Note About Spelling

Like the original X-COM, Terror From The Deep was developed in the United Kingdom. As such, the game uses traditional English spelling for many words used in the game. For example, "artifact" becomes "artefact", "armor" becomes "armour", and so on. To maintain consistency within the instruction manual (and to avoid offending my college English teacher), I've taken the liberty of converting all the English spellings into American ones for the sake of book continuity.

In order to minimize any confusion that may arise due to the name similarity between the original X-COM: UFO Defense and X-COM: Terror From The Deep, the following spelling and style conventions will be used throughout this book. Whenever the original X-COM is mentioned, it will be referred to as X-COM. The sequel—which this book covers—will be referred to by using the acronym TFTD (for Terror From The Deep).

Scoring, Winning, and Losing

At the heart of your struggle to rid the oceans of the alien infestation is the concept of scoring. As you play the game, you must undertake certain activities that will earn you points. For example, if you successfully engage and ground a submarine, investigate the crash site, and capture or kill all the aliens at the crash site, you're given a positive score (see the following section). Likewise, if one of your Barracuda interceptors gets blasted into fish bait by an aggressive alien vessel, you receive a negative score (see the following secion). If that wasn't bad enough, you also must contend with the fact that the aliens are earning points at the same time (see the following section).

Positive game activities:

- Shooting down or destroying alien submarines
- Killing or capturing aliens
- Performing successful research
- Collecting alien equipment and corpses
- Destroying alien colonies and artifact sites
- Successfully defending X-COM bases from alien attack
- Saving civilians during alien terror attacks

Negative game activities:

- X-COM craft (interceptors and transports) destroyed by aliens
- Soldiers, civilians, or SWS platforms killed or destroyed by aliens
- Fratricide: Soldiers, civilians, or SWS platforms accidentally (or purposefully) killed or destroyed by X-COM soldiers
- Ignoring terror sites

Alien scoring activities:

- Alien submarines crossing through the territories of funding countries
- Building and maintaining alien bases
- Conducting terror raids
- Signing pacts with funding countries

All these points come into play at the end of each game month when you are presented with the X-COM Monthly Report screen (see Figure 1.1). At that time, the computer subtracts the points that the aliens have managed to earn in that month from yours. If the total is positive, you're doing well and some member nations of the X-COM funding committee may even decide to increase funding of your project.

If the total is negative, it means that the aliens have been more productive in the last month than you have. If the negative score is low enough, some funding countries may decide to reduce and/or eliminate funding of the X-COM project altogether!

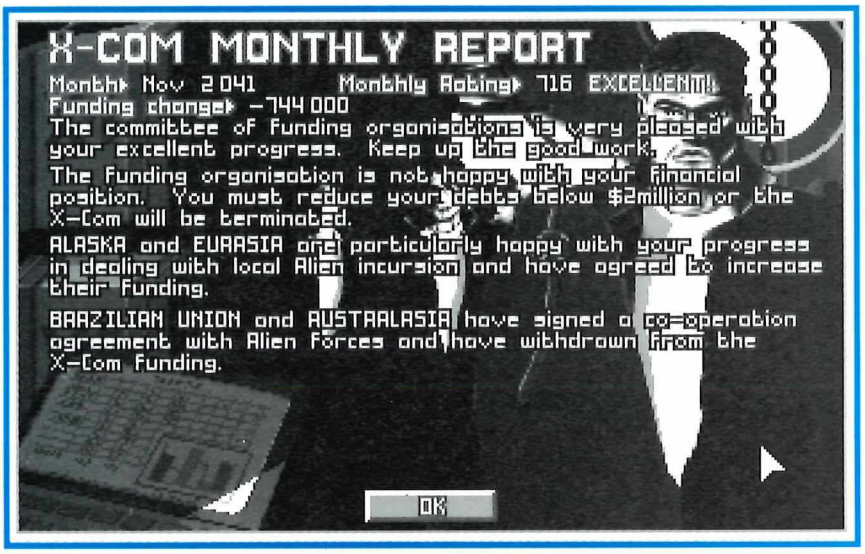


Figure 1.1. Monthly Scoring Report screen.

Calculating Points

How does the computer calculate your point totals? At the most basic level, the formula looks something like the following:

> Points earned by X-COM in game month - (minus) Points earned by aliens in game month = Monthly Score

The monthly score is the figure listed to the right of the Monthly Rating heading on the X-COM Monthly Report screen. If you're playing at the Beginning difficulty level, your scores can be lower than at more difficult levels.

Although a positive score indicates that you're doing well overall, you could still encounter trouble in certain areas of the world.

Figure 1.1 is an excellent example of this situation. In this example, the monthly rating is 714—worth the "Excellent!" commendation next to the score. The territories of Alaska and Eurasia increased their funding, while two territories (the Brazilian Union and Australasia) dropped out of the X-COM funding committee altogether and signed a pact with the aliens!

Although useful, your monthly rating should be considered only one indicator of your success. More useful for gauging the validity of your efforts are the funding and graphs menu options (discussed in more detail in Chapter 2) on the main Geoscape menu bar. These options—especially the graphs feature—provide detailed information on alien and X-COM activity.

Game Objective

Your ultimate objective is to defeat the aliens and drive them from the Earth forever. By carefully managing your production, research, and combat options, you'll be able to eliminate the aliens and free the citizens of the world from their insidious influence.

But to reach the final alien base at T'leth, you must have been able to research and manufacture a Leviathan transport craft. Only the Leviathan has the hull strength to withstand the crushing ocean depths in which T'leth lies.

Winning the Game

To win the game, you must destroy all twelve alien artifact sites *and* destroy the alien mastermind at the alien city of T'leth. Anything less just won't cut it.

Losing the Game

You lose the game when any of the following occurs:

- All your bases are destroyed by the aliens
- You lose all your funding nations to the aliens
- You're in debt for over $1,000,000 for two consecutive months
- You have two consecutive "bad" losing months (based on your point total)
- You failed in the final mission to destroy the alien brain at T'leth

Depending on the difficulty level at which you're playing, the negative point value required for a losing month varies. If you're playing at a difficult game setting, the point tolerance will be much lower.

2

The Geoscape Screen and Base Construction

In this chapter we take a look at what can be considered the "main menu" of TFTD: the Geoscape screen.

From the Geoscape, you can keep tabs on alien and X-COM activity the world over, noting the location of alien colonies, artifact sites, and terror sites as they appear. Using the information presented on the Geoscape, you can plan your strategy accordingly, launching interceptors and transports to engage the enemy wherever they appear on Earth, either above or below water.

In addition to serving as a huge map of the Earth's surface, the Geoscape gives you access to nearly every aspect of gameplay in TFTD. Using the button bar on the right-hand side of the Geoscape screen, a myriad of functions and features are just a mouse-click away. In this chapter, we take a look at the main functions of the Geoscape and briefly discuss each of them. In addition to looking at the Geoscape screen, we take a look at the first thing you should do as an X-COM commander—building your first base. Using your first base construction experience as a stepping stone, we then examine the intricacies of the placement, construction, and management of X-COM bases.

The Geoscape Screen

The Geoscape screen consists of two primary elements: a 3D globe of the Earth that occupies most of the screen (the Geoscape window), and a strip of buttons and control icons that occupy the right edge of the screen (see Figure 2.1).

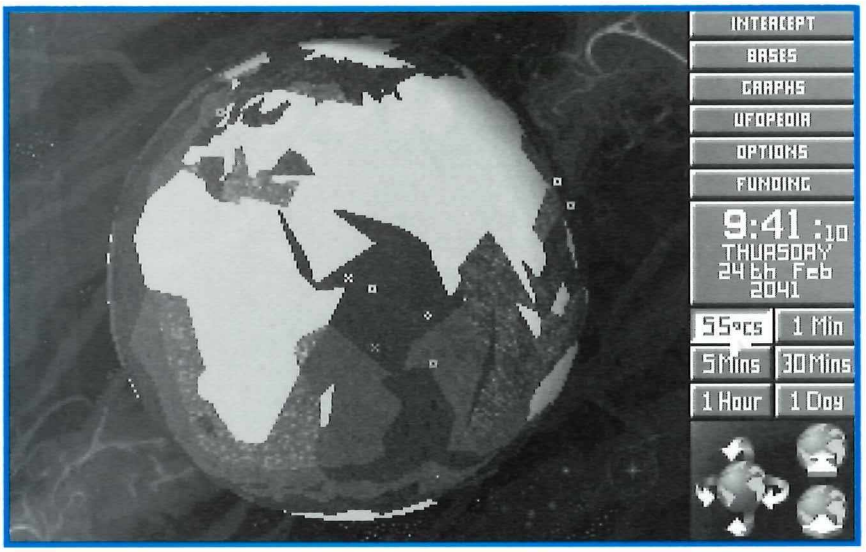


Figure 2.1. The Geoscape screen.

Geoscape Window

The Geoscape window displays a 3D globe of the Earth. Using the directional arrows and view controls in the lower-right corner of the screen, you can adjust your view of the Earth. Using the compass-like directional arrows, you can rotate the Earth in any of four compass directions. The zoom controls allow you to zoom in for a closer look at the Geoscape, or to zoom out for a more strategic view of the action.

Right-clicking anywhere on the 3D globe of the Earth displayed in the Geoscape window immediately centers your view on that location.

As you look at the Geoscape, you'll notice a variety of small symbols dotting the landscape. In addition to the expected map symbols for Earth cities and nation boundaries, you'll come across a variety of unique map symbols. These symbols indicate a variety of things, as described in Table 2.1.

Table 2.1. Geoscape Map Key.

Symbols	Representation
Blue hollow square	X-COM base
Pink hollow square	Alien colony
Red solid square	City
Yellow cross	X-COM submarine
Red cross	Alien submarine
Pink cross	Alien artifact or terror site
Orange "X"	X-COM craft waypoint
Green "X"	Landed USO
White "X"	Downed USO

Whenever you're looking at the Geoscape screen, time is in motion. The dastardly schemes of the aliens are being played out as you look at the screen, with alien subs coursing the seas and alien terrorists casting their eyes on hapless human cities, ports, and ships. To pause the alien actions, simply select any of the menu items at the right of the screen. Game time is then halted until you exit the pertinent menu option and return to the Geoscape window.

Menu Options, Game Time, and Time Controls

On the right side of the Geoscape window is a strip of buttons and a small information panel that provides the current game time. Starting at the top right, there are several large buttons that are used to access other aspects of the game. Starting from top to bottom, these buttons are labeled the following: INTERCEPT, BASES, GRAPHS, UFOPEDIA, OPTIONS, and FUNDING. Each of these buttons and the functions they perform are described in more detail below.

Intercept

To launch an interceptor or transport from any of your bases, click the **INTERCEPT button** (see Figure 2.2).

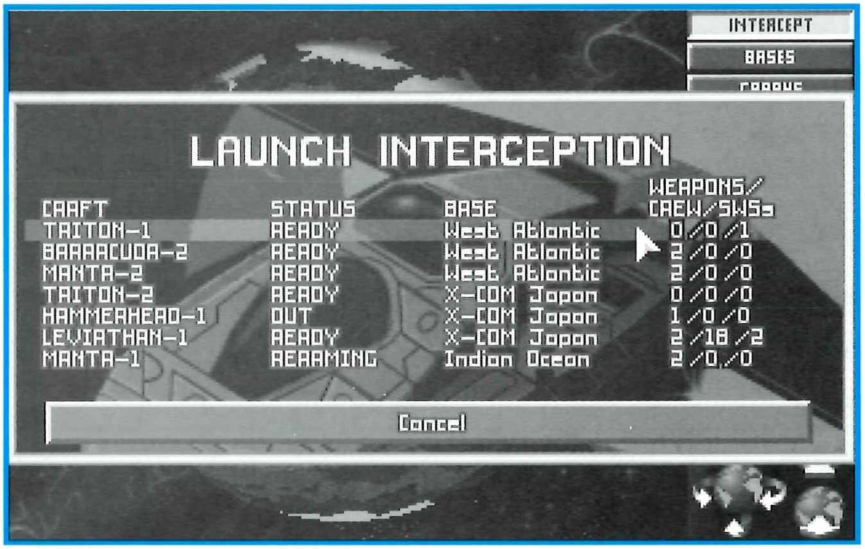


Figure 2.2. The Intercept screen.

For more information on equipping submarines and launching interceptors, see Chapter 4, "Detecting and Intercepting USOs."

Bases

Selecting the **BASES** button takes you to the Bases screen (see Figure 2.3). This screen is used for all aspects of base management, from building new bases, initiating research and manufacturing projects, and recruiting aquanauts, scientists and technicians. The left of the screen displays an overhead view of the currently active base, while the right side contains a list of buttons. We'll take a quick look at each of these buttons and the functions behind them.

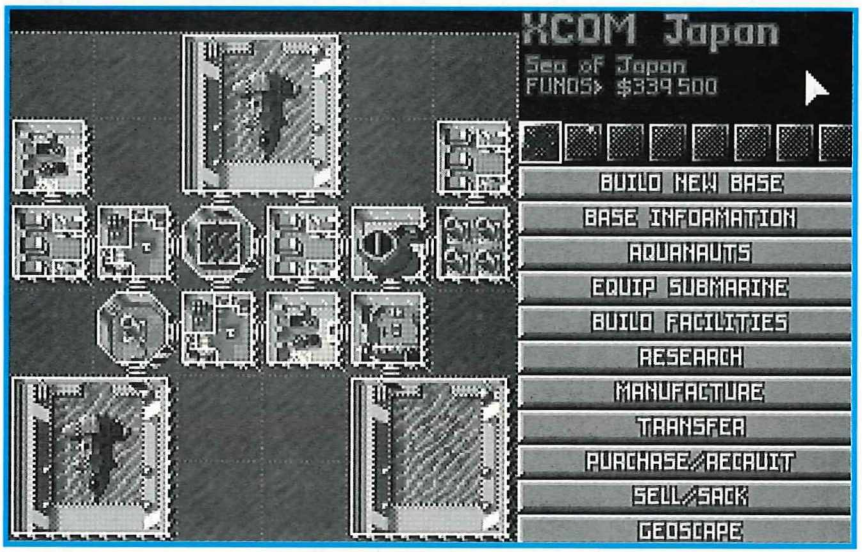


Figure 2.3. The Bases screen.

Building New Bases

If you want to build a new X-COM base, simply click the **BUILD NEW BASE** button. For more information on placing a new X-COM base, see "Choosing Your First Base Site" later in this section.

Base Information

This button provides a wealth of information about the currently selected base (see Figure 2.4). At a glance, you can examine a variety of base information. At the bottom of this screen are four buttons, labeled OK, TRANSFERS, STORES, and MONTHLY COSTS. The

OK button returns you to the Bases screen when selected. The TRANSFERS button lets you know what personnel and equipment is en route to the selected base, while the STORES button gives you a detailed accounting of all the equipment currently in your general stores facilities of your base. Finally, the MONTHLY COSTS button allows you to get a quick status report on the financial health of your X-COM operation for *that* base.

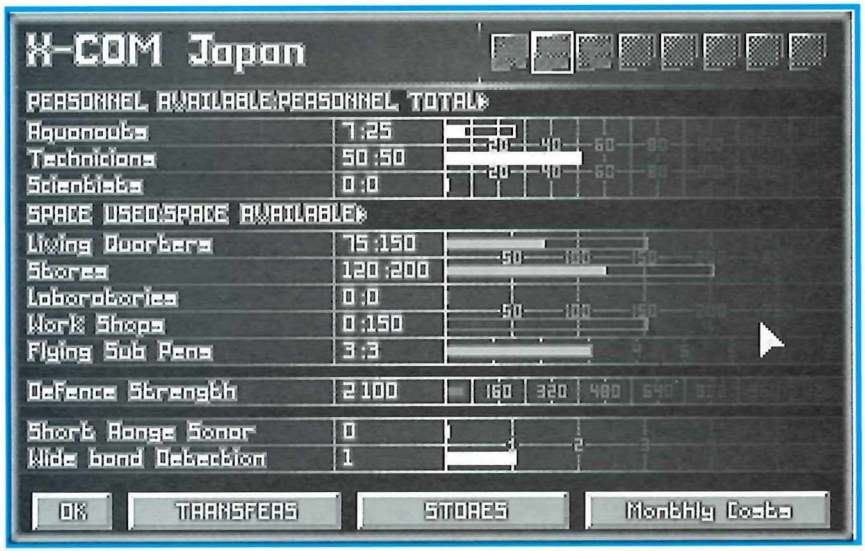


Figure 2.4. The Base Information screen.

Aquanauts

If you want to examine and equip your aquanauts, choose the **AQUANAUTS** button. For more information on Aquanauts, see Chapter 5, "Aquanauts."

Equip Submarine

To equip a submarine with weapons or to load a transport with soldiers and equipment, select the **EQUIP SUBMARINE** button. For more information on equipping submarines and launching interceptors, see Chapter 4, "Detecting and Intercepting USOs."

Build Facilities

Selecting the **BUILD FACILITIES** button, you can access a sub-menu that lets you add new base facilities to the current base. Fore more information on the base facilities you can build, see the section on "Base Facilities" later in this chapter.

Research

This button provides access to all of the research facilities of the current base. For more information on research, see Chapter 3, "Money, Manufacturing, and Research."

Manufacture

This button provides access to all of the manufacturing facilities of the current base. For more information on manufacturing, see Chapter 3, "Money, Manufacturing, and Research."

Transfer

To transfer items or personnel to another base, select this option.

Purchase/Recruit

To recruit new aquanauts, technicians or scientists, select this menu option.

Sell/Sack

Selecting the **SELL/SACK** button to sell unwanted equipment or to fire unneeded or unsatisfactory personnel.

Geoscape

Selecting the **GEOSCAPE** button returns you to the Geoscape screen.

Graphs

The graphs function provides the user with a variety of graph types that provide detailed information on the activity of X-COM and alien forces (see Figure 2.5).

Carefully analyzing the information presented in the graphs section is vital to good game strategy. Using the information presented in the various graphs, you can easily spot where the aliens have been most active. If you see a large increase in alien activity in the Pacific Ocean, for example, you should increase the number of interceptor patrols over that area. The countries residing in areas with high levels of alien activity may be much more likely to abandon their support of the X-COM project and side with the aliens. For that reason, check the data contained in the Graphs screen on a regular basis.

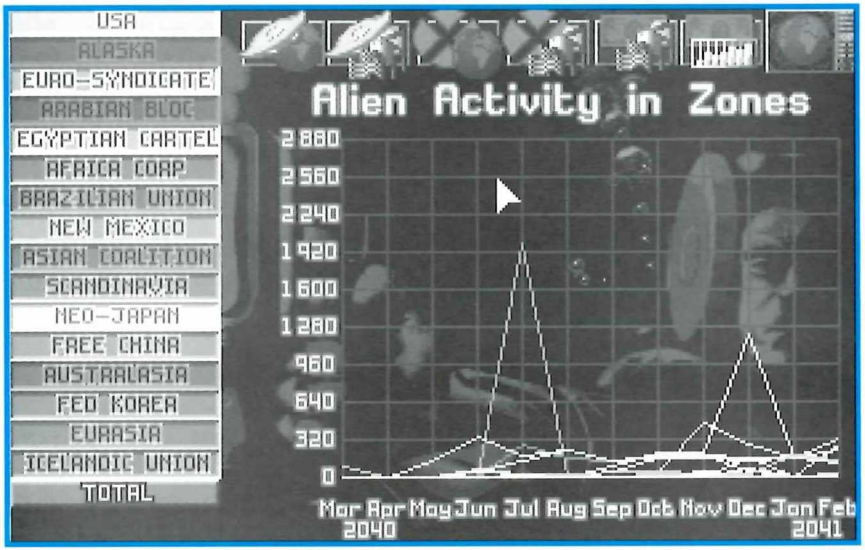


Figure 2.5. The Graphs screen.

UFOpedia

Selecting the **UFOPEDIA** button causes the UFOpedia menu to appear (see Figure 2.6). The UFOpedia stores all the information that your scientists have been able to discover about alien artifacts, races, and alien submarines. In addition, it provides data on the more mundane items in the X-COM arsenal.

Figure 2.6. The UFOpedia screen.

Options

The **OPTIONS** button is used to access the game option screen (see Figure 2.7). Using this screen you can save games in progress, load previously saved games, and abandon a current game. Simply click on the requisite button to carry out the action labeled on each button.

Figure 2.7. The Options screen.

Funding

To see how well financed you are by the members of the X-COM funding committe, select the **FUNDING** button (see Figure 2.8).

Figure 2.8. The Funding screen.

Choosing Your First Base Site

When your first game of TFTD begins, you are asked to choose a location for your first base (see Figure 2.9). Choosing a good base site is one of the most important aspects of TFTD. Choose a poor location for your base, and the member nations of the X-COM funding committee may not be adequately protected from the alien menace, resulting in dissatisfaction with your handling of the X-COM project and an appropriate reduction in funding.

The best base sites are those which give maximum coverage to the wealthiest of countries. As much as you'd like to cover every square inch of the globe, you only have a limited amount of resources at your disposal. To make the best of those resources, you need to maximize the effectiveness of each base you build.

Figure 2.9. Placing your first base.

When placing a new base, you should carefully examine the information contained in Tables 2.2 and 2.3. Table 2.2 lists a sample first month of funding that X-COM receives from the X-COM funding commitee. As you can see by looking at the table, the United States is by far the wealthiest country listed. Looking at this information alone, you may be tempted to place your first base right next to the United States. Although this may seem like a sound strategy, a better strategy is to place your base as close to as many wealthy countries as possible. For example, a base in the Sea of Japan would provide coverage for five wealthy countries: the Asian Cartel, Fed Korea, Neo Japan, Free China, and Australasia. Using the funding data provided in Table 2.2, this means that a base in that particular area would provide protection for over *two million dollars* worth of X-COM funding! For that reason, the Sea of Japan is easily one of the best locations for a base.

When deciding on the location of another base, refer to the information contained in both of these tables to make an informed placement decision. Table 2.3 provides the base startup costs to begin building a base in those areas. Another good starting location for a base is in the North Atlantic region.

Table 2.2. Average Funding By Nation For First Game Month.

Nation	Funding
USA	$859,000
Asian Cartel	$619,700
Arabian Block	$514,700
Fed Korea	$454,800
Neo Japan	$440,700
Free China	$424,300
Egyptian Cartel	$349,500
Alaska	$347,000
New Mexico	$346,400
European Syndicate	$317,000
Africa Corporation	$302,800
Australasia	$260,200
Eurasia	$243,100
Scandinavia	$219,400
Brazilian Union	$210,300
Iceland Union	$154,200

**The figures presented here are based on a 10-game average of funding country contributions.*

Table 2.3. X-COM Base Startup Costs.

Nation	Startup Costs
Africa	$500,000
Antarctic	$750,000
Arctic	$600,000
Caribbean	$800,000
Eurasia	$500,000
Indian Ocean	$550,000
Mediterranean	$1,000,000
North America	$500,000
North Atlantic	$800,000
North Pacific	$900,000
Sea of Japan	$500,000
South Atlantic	$950,000
South China Sea	$650,000
South Pacific	$600,000

Naming Your Base

After your new base is placed, you are asked to name it. You can give your new base any name, but it's a good idea to give it a descriptive name based upon the geographic location of the base. For example, a base placed close to Japan could be given the name "X-COM Japan." A base placed in the South Pacific region could be called "XCOM SouPac," and so on.

Naming your bases after their locations makes it easy to launch the correct interceptors to engage sighted USOs. Launching an interceptor from a base in the Atlantic to intercept a USO in the pacific region only results in wasted fuel and an escaped USO. More importantly, another threat may materialize next to your base as your interceptor is on a wild goose chase halfway around the world.

What Base Facilities Should I Build First?

You have no choice but to build an airlock after you have named your base. However, you should immediately start building an alien containment facility and living quarters after the airlock is finished. The alien containment facility is vital for capturing live aliens (which is an extremely important part of your research effort), and the living quarters give you the extra living room needed to hire more personnel, in particular aquanauts and scientists. As the game develops, you can add base facilities on a case-by-case basis. Table 2.4 lists all of the base facilities available in the game; for more information, refer to the UFOpedia function found on the Geoscape screen.

Table 2.4. Base Facilities Summary.

Name	#Days	Const. Cost	Month. Main. Cost	Descript.
Airlock	1		$4,000/Mo	
Alien Containment	18	$400,000	$15,000/Mo	Ten alien capacity
Bombard. Shield	38	$1,200,000	$15,000/Mo	Doubles other defenses
Gauss Defenses	24	$400,000	$10,000/Mo	Hit ratio: 60% DV: 600
General Stores	10	$150,000	$5,000/Mo	Fifty unit supply capacity
Laboratory	26	$750,000	$30,000/Mo	Fifty research point capacity
Living Quarters	16	$400,000	$10,000/Mo	Accommodates fifty
M.C. Generator	33	$1,300,000	$5,000/Mo	Makes base harder to find
M.C. Lab	24	$750,000	$16,000/Mo	Trains soldiers in M.C.
PWT Defenses	34	$800,000	$14,000/Mo	Hit ratio: 80% DV: 1200
Sonic Defenses	34	$600,000	$12,000/Mo	Hit ratio: 70% DV: 900
Standard Sonar	12	$500,000	$10,000/Mo	
Sub Pen	25	$200,000	$25,000/Mo	Holds 1 submarine
Torpedo Defenses	16	$200,000	$5,000/Mo	Hit ratio: 50% DV: 500
Transmission Res.	26	$1,400,000	$30,000/Mo	Deciphers alien missions
Wide array sonar	25	$800,000	$15,000/Mo	
Workshop	32	$800,000	$35,000/Mo	Fifty manufacture points

Base Construction Strategies

Although you're somewhat stuck with the layout of your first base, you can—*and should*—adopt a base construction strategy when building your new bases. The primary reason for the importance of good base design is that aliens may occasionally find and attempt to destroy your bases by sending in alien troops. The layout of your base is then used in the ensuing battle, making a well designed base constructed with an eye towards defense an invaluable asset.

Build Defensively

In the original X-COM, invading aliens entered your base through the hangars and elevators. Because you always knew where the aliens were coming from, it was simply a matter of creating choke points around elevators and cordoning off your hangars to prevent the aliens from spreading throughout your base. However, this is not the case in TFTD—aliens can (and do) appear almost anywhere during base attacks. Although this new development can limit your strategies somewhat, there are some steps you can take when building your bases to make them more defensible.

From a defensive standpoint, there are definite "good" and "bad" base designs. A poor base design would lump all of your base facilities together, creating a huge maze of interconnected rooms in which aliens can hide and move about with impunity. One defensive design is to create narrow corridors as show in Figure 2.15. In this example, the base is filled with long, narrow corridors. When and if aliens do attack your base, it's a simple matter to send teams of aquanauts up and down the corridors, flushing out any aliens they encounter. And because these narrow corridors restrict the movement of the aliens to either going towards or away from your soldiers, you can quickly clean out the corridors of your base and establish choke points to head-off any remaining aliens. This also makes finding aliens who are hiding in your base a much less frustrating process. For more information on defending a base from alien assault, see Chapter 8, "X-COM Bases and Alien Colonies."

Base Specialization

Although your base may begin as a single airlock, you'll eventually want to add new facilities to your base. Even though you can add and remove base facilities to your heart's content, it helps to have an overall base construction strategy. For example, your base construction may revolve around two strategies: base specialization and base evolution. These two strategies work well together, as you see in the following sections.

Why Should My Bases Specialize?

First, you should take a look at base specialization and the advantages it brings.

Less Expensive

Separating your research and manufacturing facilities is simply a waste of time and money. Concentrate all of your technicians and scientists at one base, and you'll find that technological breakthroughs and manufactured goods occur much more frequently than if you have 10 scientists and researchers at each base. The work that scientists and technicians perform at separate bases is *not* cumulative. To get the best out of both personnel, put them all in one base.

Easier to Defend

Smaller bases are much easier to defend than larger ones. Because defending a small base from an alien attack is usually not that difficult, refrain from spending any money on UFO defenses.

For more information on defending bases, see Chapter 8, "X-COM Bases and Alien Colonies."

Covers More Territory

Instead of having two large, expensive bases that perform everything, giving unique roles to each of your bases allows you to have more bases, which increases the territory you can control and cover. This topic is discussed in more detail in the following section.

Evolution of a Base

One useful strategy is to have your bases "evolve" from one specialization to another. For example, a base that starts out as an airlock can add a wide array sonar. The base can now detect alien submarines and serve well as a sonar listening post. A few months later, you may decide to upgrade the base with a sub pen, an interceptor, and some extra facilities. Now that the base can detect and intercept alien subs, you can upgrade it to a "sub interception" base.

All of your bases don't need to "evolve" to become large bases. In fact, having a variety of bases—such as two sub interception, two sonar listening posts, and one strike base—allows you to cover more territory for less money than two or three very large bases.

Creating a New Base

To begin with, you need to first create a new base. To do so, select the **BUILD NEW BASE** button from the Bases screen. After selecting a suitable site for your new base, you must select a location for the airlock (see Figure 2.10).

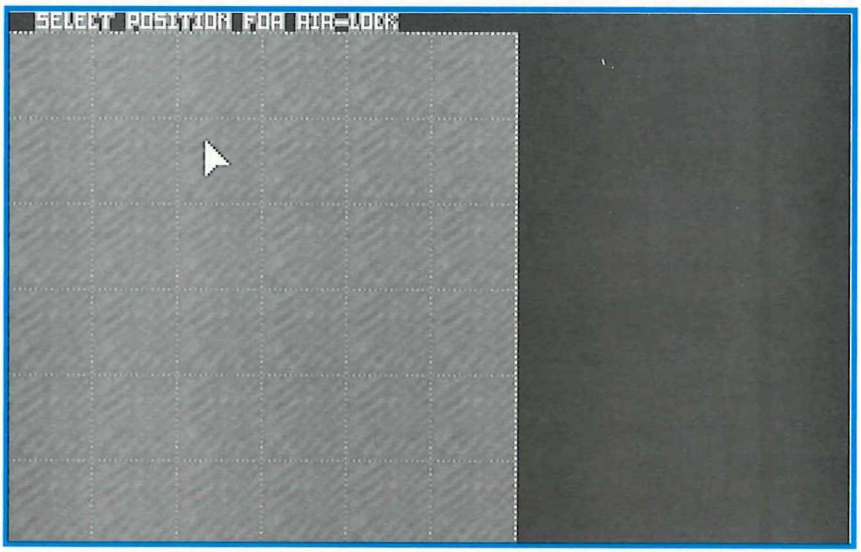


Figure 2.10. Building a new base.

After the airlock has been placed, your new base looks like the base shown in Figure 2.11.

Figure 2.11. Base with an airlock.

After you've placed the airlock, you should now place your next base facility, which should probably be some sort of detection device. When the sonar facility is completed, your base has graduated to the next level on the base evolutionary scale—the sonar listening post.

Sonar Listening Post

The job of this base is to simply detect the presence of alien submarines in the surrounding waters (see Figure 2.12). Although it doesn't have the capability to actually intercept subs, you can use it to detect alien subs for interceptors from other bases to shoot down.

Figure 2.12. Base with an airlock and wide sonar.

Eventually, you may want to add a sub pen and an interceptor to your base so you can start intercepting USOs. After you've added these items, you should add general stores and living quarters to house a small garrison of aquanauts. Your base can now be considered a USO Interception Base.

USO Interception Base

Why do you need soldiers at a USO Interception Base? When you start intercepting alien subs with interceptors, the aliens begin to keep track from where the X-COM interceptors were launched. After a certain number of subs have been shot down—enough to make the aliens mad—they'll come looking for the base from where the interceptors came. When they do, you'll need the aquanauts to defend the base (see Figure 2.13).

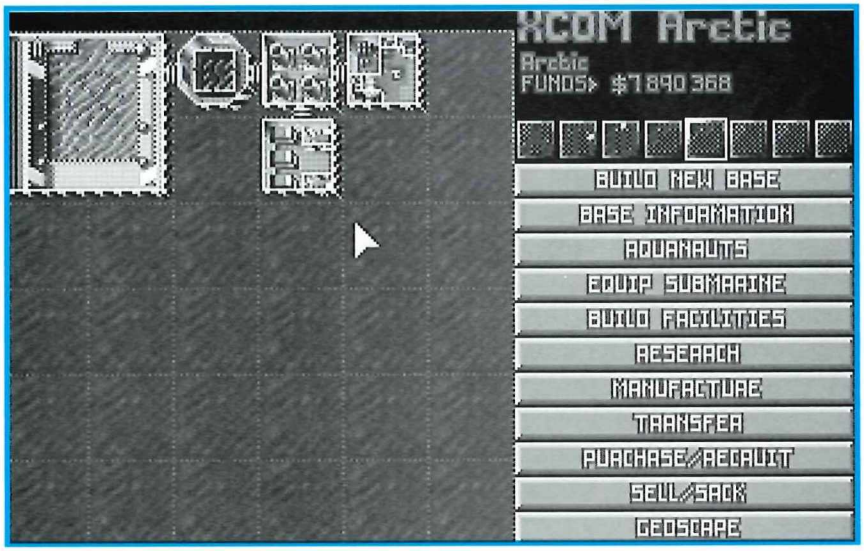


Figure 2.13. Base with an airlock, wide sonar, sub pen, living quarters, and general stores.

Assault Team Base

Eventually, you may want to add another sub pen and a Triton transport to your base. When this occurs, you can send your aquanauts into combat. After you've done this, your base can now be considered an Assault Team Base (see Figure 2.14).

Figure 2.14. Assault Team Base.

Command Base

This base serves as the command center of your X-COM operations. All of your laboratories and workshops are centrally located here in order to achieve economies of scale (see Figure 2.15). However, don't put any sub pens in your command base, because aliens have a nasty habit of tracking down interceptors to their origin points and assaulting the base. Because of this, you can concentrate almost all of your efforts on research and production without needing to worry about constant attacks from vengeful aliens.

As mentioned previously, aliens keep track of where your attacks originate. Because the base dedicated to research and manufacturing never launches attacks against USOs or sends troopers to landing sites, the aliens will have a very difficult time finding it. The aliens are much more likely to find your smaller strike and recon bases, which are much easier to defend (due to their small size) and much less expensive to maintain. Even if the aliens manage to successfully assault and destroy a strike or recon base, losing that base will cost you much less money than losing all the research, manufacturing, and training facilities of a larger base.

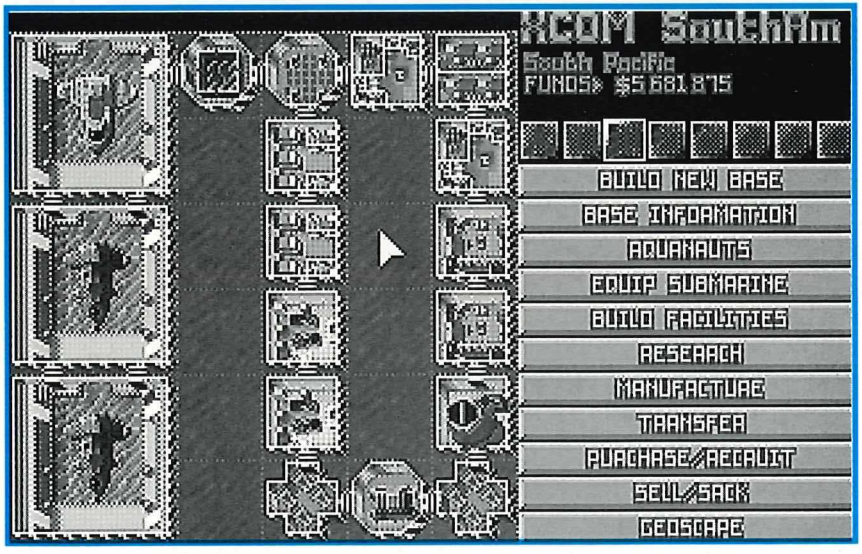


Figure 2.15. Command Base.

Aliens Are Attacking My Base!

Regardless of how careful you are at hiding your bases from the bug-eyed glare of hostile aliens, you'll most likely have to defend yourself against an armed assault by aliens. When your base is under attack, a screen like the one shown in Figure 2.16 appears.

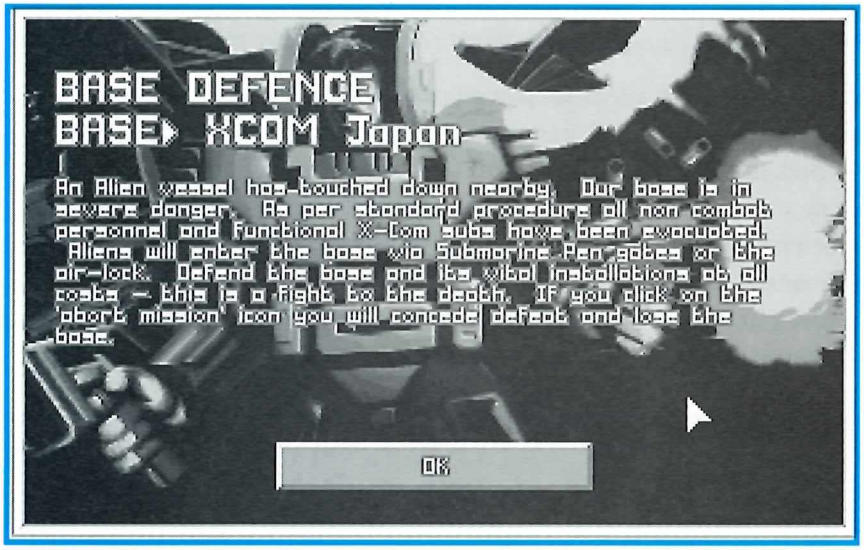


Figure 2.16. The X-COM Base Defense screen.

For more information on defending your bases against the aliens, see Chapter 8, "X-COM Bases and Alien Colonies."

Dismantling Base Facilities

Sometimes you may need to dismantle some of your base facilities. This can occur for a variety of reasons, ranging from cost-cutting measures to replacing obsolete facilities with newer, more capable ones. This is particularly true for base defense and detection facilities, which are constantly being upgraded and improved. To dismantle a facility, simply enter the Bases screen and click on the facility you want to dismantle. Facilities can be dismantled at any time, even if they are currently under construction. After clicking on the facility, select **OK** on the dialog that appears to remove the facility from the base.

In some cases, however, you won't be able to dismantle a base facility because it is the only facility connecting other facilities to the airlock (see Figure 2.17). To get around this problem, your only option (outside from using a cheat utility) is to build a string of inexpensive base facilities next to the facility you want to remove, and surround it with a contiguous chain of facilities (see Figure 2.18).

In the example shown in the following figures, an outdated wide array sonar is being replaced by a new transmission resolver. After the general stores facilities have been completed, dismantle the wide array sonar and replace it with the transmission resolver (see Figure 2.19). After the transmission resolver has been constructed, dismantle the three general stores facilities (see Figure 2.20). Figure 2.21 shows the results of your efforts.

Figure 2.17. The Cannot Dismantle Aqua-Pod warning dialog.

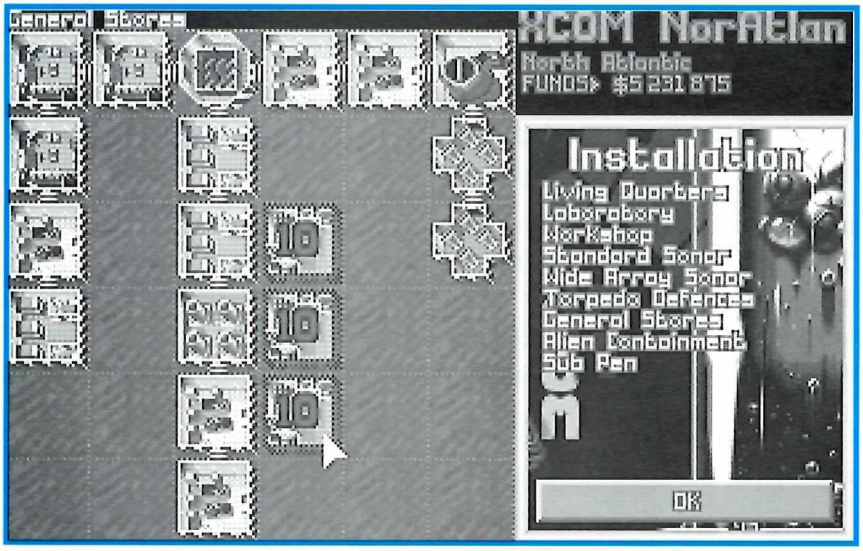


Figure 2.18.. Step one: Build adjoining base facilities.

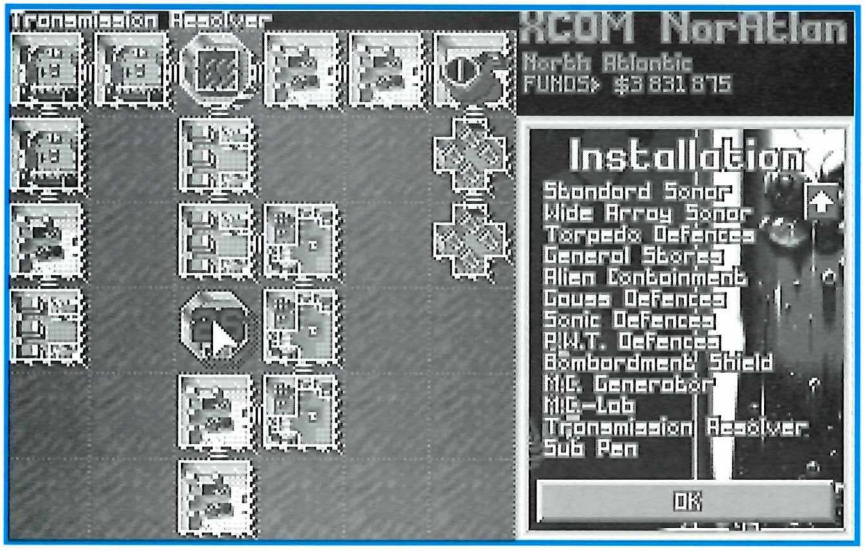


Figure 2.19. Step two: Dismantle the facility and construct the new one.

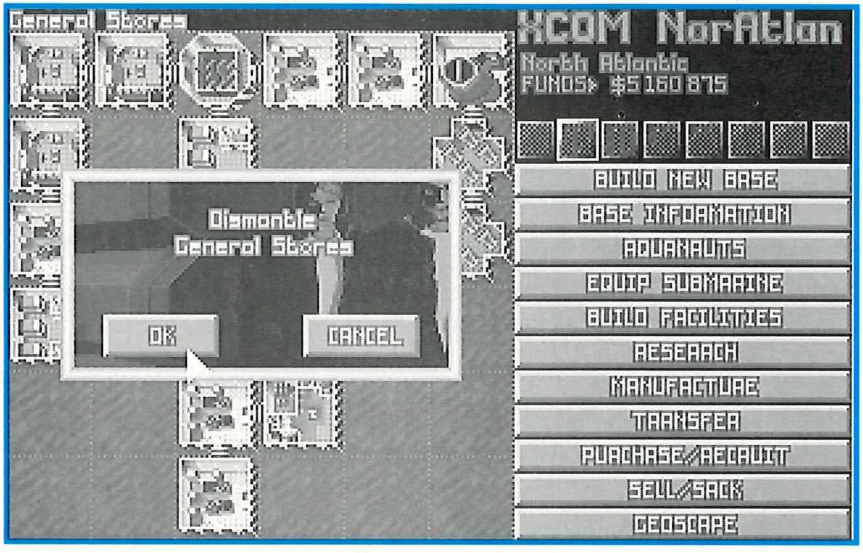


Figure 2.20. Step three: Dismantle adjoining base facilities.

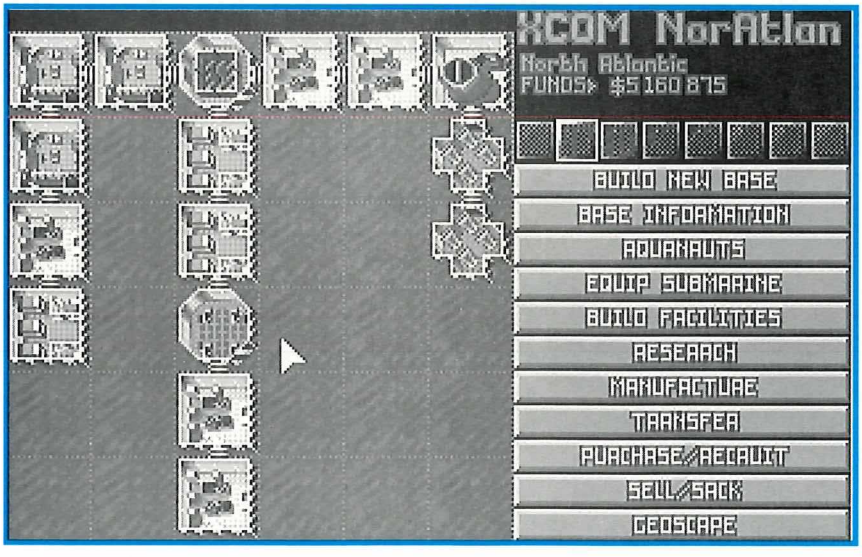


Figure 2.21. Step four: The newly constructed transmission resolver.

As mentioned previously in the section on defensive base construction, keeping your base facilities connected in a snake-like fashion makes them much easier to defend when they are attacked by aliens. In the example displayed in Figures 2.17-2.21, you could build new facilities next to your old ones if you wished. However, this would eliminate the

defensive advantages of having your base designed to channel aliens into designated "kill zones" and choke points. Always keep the defensive value of your base design in mind as you add and remove base facilities.

Dismantling an Entire Base

For whatever reason, you may eventually need to dismantle an entire base. Your decision to remove a base can result from a variety of factors, including (but not limited to) a lack of funding, a poor geographic location, or frequent attacks by aliens.

To dismantle an entire base, you must first remove all the equipment, submarines and personnel from the base; however, you won't be able to remove any base facilities if they are partially filled. After all the equipment, personnel and subs have been sold, sacked or transferred to another base, simply begin removing base facilities as described previously in the "Dismantling Base Facilities" section. After all the base facilities have been dismantled, you can then dismantle the airlock. This eliminates the base from the Geoscape screen and removes it from play.

3

Money, Manufacturing, and Research

Although your X-COM interceptor pilots and soldiers grab all the headlines by shooting down alien submarines and fighting the aliens on the ground (or underwater), your teams of scientists and technicians work patiently behind the scenes, diligently toiling away on essential research and manufacturing projects.

In this chapter, you examine three aspects of X-COM that you can't afford to overlook: money, manufacturing, and research.

Money

Just like any other organization, X-COM needs a continuous supply of money to pay for personnel, equipment, administrative expenses, and other costs. Listed below are the most common income and expense sources for X-COM.

Income

X-COM Funding Committee

This is your main source of income at the beginning of the game, and it remains part of your balance sheet even when you've managed to develop other sources of income. The amount of money you get from each member nation of the X-COM funding committee is based largely upon how much money they contributed to X-COM during the very first month of game time. See Figure 3.1 (for more information, see the country funding tables in Chapter 2). The amount you receive from each country every month will be mostly based on that initial contribution , although it can fluctuate up or down due to a variety of factors, most notably how well you're doing in your war against the aliens. If you've been knocking down USOs with aggressive regularity, slaughtering aliens wholesale on the battlefield and basically giving the aliens a good roughing up everywhere they appear, countries will be much more likely to increase the amount of their monthly contribution. Countries are also very finicky about where you're sending your interceptors and where you're shooting down USOs. Countries will respond most favorably if you've been active over their territories: they could care less how well you're fighting the aliens elsewhere.

Figure 3.1. A sample X-COM funding report.

Sale of Captured Alien Artifacts

Although it may only start out as a very minor part of your income, the sale of captured alien equipment, weapons, and even alien corpses can quickly become the biggest contributor to the X-COM treasury. Items recovered from alien USOs can be sold back at your base by clicking the **SELL/SACK** button on the Bases screen.

Sale of Manufactured Goods

One often overlooked revenue source is the sale of goods manufactured by X-COM. With a healthy supply of technicians at your disposal, you can begin constructing a wide variety of goods, and then sell them on the open market (see Table 3.1 for more information).

Expenses

Base Maintenance

A major expense for any X-COM commander is base maintenance costs. You can limit this expense by replacing old, outdated structures as soon as possible with more capable versions. For example, if you have a base with three wide-array sonar facilities, you can replace all of them with a transmission resolver, which traces alien submarines much more effectively. Base defense systems and detection devices are the structures that usually need the most upgrading.

Monthly Personnel Wages

Paying the monthly salaries of all the aquanauts, scientists, and technicians at your base can add up to be a substantial sum, especially if you have a large number of scientists and researchers on staff.

To cut down on salary expenses, use the following trick, which requires at least two bases—one base holding all of your scientists, plus another base with a surplus of living quarters. At the end of each month—within the last 2–3 hours of the last day—transfer *all* of your scientists and technicians to the second base. These personnel will be en-route to the new base as the month ends, and you will not be charged the monthly salaries for any of the personnel being transferred. After the personnel arrive at the second base, simply transfer them back to the first base and resume your manufacturing and research efforts.

Item Production Costs

Each item you manufacture costs a fixed amount to produce. See Table 3.1 for more information.

Monthly X-COM Craft Rental

Contrary to popular belief, Tritons and Barracudas are not owned by X-COM. Instead, they are leased on a monthly basis from the manufacturers. Because of this, each Triton and Barracuda in your base will cost you a fixed rental fee every month. To avoid this problem, build your own craft, such as the Manta, Hammerhead, and Leviathan.

Equipment Purchases

As an X-COM commander you have a limited ability to purchase small amounts of conventional weapons and supplies. Each item you purchase costs a set amount of money.

Equipment Transfer Costs

Whenever you transfer equipment from one base to another, you are charged an equipment transfer fee. Keep this amount low by limiting equipment transfers to the most vital equipment. Instead of transferring items that can be purchased, it is usually a better idea to sell the items at the base of origin and have the intended recipient base buy the equipment itself.

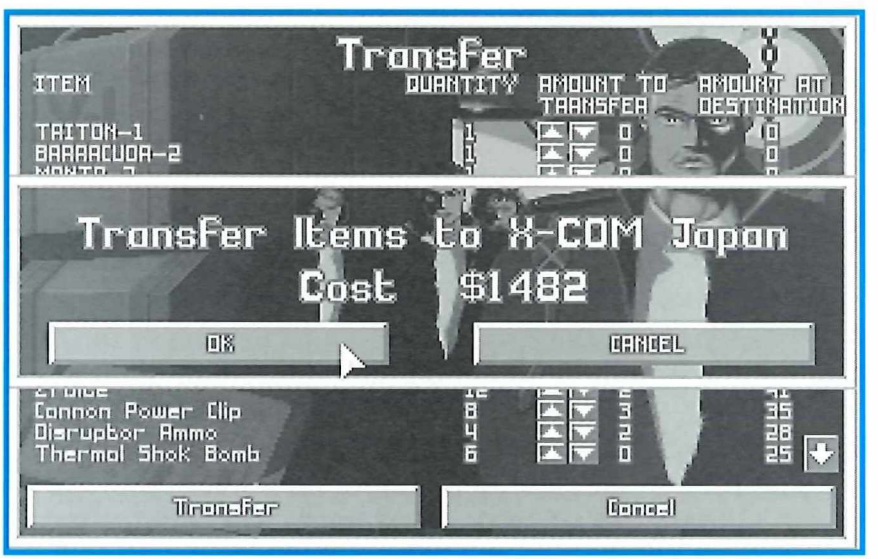


Figure 3.2. Transferring equipment from one base to another.

Manufacturing

Using your technicians and your manufacturing facilities, you can build a variety of items, weapons, and vehicles. At the beginning of the game, you won't be able to build anything. But as developments in research continue, you'll be able to manufacture more and more items. To access your manufacturing facilities, select the **MANUFACTURE** button on the bases screen. The manufacturing screen will appear, allowing you to begin and terminate production projects. (See Figure 3.3.) See Table 3.1 for a comprehensive listing of all the equipment you can manufacture in TFTD.

Figure 3.3. The main manufacturing screen.

Manufacturing Strategies

Be Selective

You should only manufacture items that you can't live without, such as armor for your soldiers and ammunition for your interceptors. If your troops are primarily using sonic weapons on the battlefield, you should never have to manufacture any ammunition at all for these weapons. Since most alien races use sonic weaponry as their weapons of choice, you'll be able to keep your ammo supplies well stocked by obtaining ammunition from downed alien USOs and alien corpses strewn about the battlescape. If an item requires Zrbite for construction, carefully consider how important the item is before expending your precious Zrbite stores on its production.

Work 'Em to Death!

Just as you should never let your scientists remain idle, you should also keep you engineers as busy as possible. If you don't need anything manufactured right away, have your technicians build something that can be resold for a profit. Using Table 3.1, you can see that manufacturing Gauss Pistols for sale is a good strategy, because that item has the greatest margin between cost and selling price.

Table 3.1. Production Item Chart.

PROD. ITEM	WORK SPACE	TECH. HOURS	AQUA PLASTIC	RAW ZRBITE	$COST	MATERIAL COST	TOTAL COST	$SALE
Aqua Plastic	10	100	0	0	$3,000	$0	$3,000	$6,000
Blasta Power Clip	4	80	0	2	$3,000	$0	$3,000	$6,000
Cannon P.C.	4	80	0	3	$6,000	$0	$6,000	$9,000
Coel./Gauss	25	1200	0	0	$500,000	$0	$500,000	$594,000
D.P. Ammo	3	220	0	3	$8,000	$0	$8,000	$17,000
D.P. Launcher	5	1200	1	0	$90,000	$3,000	$93,000	$144,000
Dis./P.W.T.	0	1400	8	25	$900,000	$24,000	$924,000	$1,043,000
Dis./Sonic	30	1200	5	30	$850,000	$15,000	$865,000	$980,000
G.C. Ammo	2	5	0	0	$200	$0	$200	$200
G.C. Cannon	6	300	0	0	$182,000	$0	$182,000	$211,000
Gauss Pistol	2	300	0	0	$8,000	$0	$8,000	$20,000
Gauss P.C.	2	20	0	0	$1,000	$0	$1,000	$1,050
Gauss Rifle	3	400	0	0	$20,000	$0	$20,000	$36,000
Gauss R.C.	4	45	0	0	$2,000	$0	$2,000	$1,950
Heavy Gauss	4	700	0	0	$32,000	$0	$32,000	$61,000
Heavy G.C.	4	70	0	0	$4,000	$0	$4,000	$3,220
Ion Armor	16	1000	5	5	$42,000	$15,000	$57,000	$42,000
I.B. Accel.	22	1400	5	16	$130,000	$15,000	$145,000	$250,000
M.C. Dis.	4	500	0	1	$160,000	$0	$160,000	$194,000
M.C. Reader	4	1200	0	1	$262,000	$0	$262,000	$304,000

PROD. ITEM	WORK SPACE	TECH. HOURS	AQUA PLASTIC	RAW ZRBITE	$COST	MATERIAL COST	TOTAL COST	$SALE
M. I. Armor	16	1400	5	16	$58,000	$15,000	$73,000	$73,000
Mag. Nav.	18	1600	3	0	$150,000	$9,000	$159,000	$159,000
Medi-Kit	4	420	0	0	$28,000	$0	$28,000	$28,000
P.W.T. TAmmo	6	600	0	4	$28,000	$0	$28,000	$53,000
P.W.T. Launcher	6	400	1	0	$242,000	$3,000	$245,000	$281,000
P.W.T. SWS Ammo	25	400	8	5	$15,000	$24,000	$39,000	$31,000
Par.Dis.Sensor	4	220	0	0	$34,000	$0	$34,000	$45,000
Plas. Aqua-Arm.	12	800	4	0	$22,000	$12,000	$34,000	$54,000
Sonic Blasta Rifle	4	820	1	0	$88,000	$3,000	$91,000	$126,000
Sonic Cannon	4	1000	1	0	$122,000	$3,000	$125,000	$171,000
Sonic Oscillator	8	500	0	15	$226,000	$0	$226,000	$267,000
Sonic Pistol	3	600	1	0	$56,000	$3,000	$59,000	$84,000
Sonic Pistol Clip	4	60	0	1	$2,000	$0	$2,000	$4,000
Sonic Pulser	2	200	0	2	$6,000	$0	$6,000	$14,000
Therm. Shok Bomb	2	200	0	1	$7,000	$0	$7,000	$15,000
Therm. Shok Laun.	3	900	1	0	$78,000	$3,000	$81,000	$35,000

Research

What Should I Research First?

Although you can take a number of different strategies and apply them to your research efforts, some strategies are better than others.

At the start of any game, you have three research topics available: Gauss Technology, Medi-Kit, and the Particle Disturbance Sensor. Of these three items, a good strategy would be to research Gauss Technology first (see Figure 3.4). Although the Medi-Kit is a vital piece of equipment, you'll find that nearly all of the wounds your soldiers suffer—at least until you can start outfitting them in protective armor—will be immediately fatal. A Medi-Kit is of little use if the soldier you intend to use it on dies before you can use it.

The Particle Disturbance Sensor is also a valuable piece of equipment, but research on weaponry and armor should take first priority. Put all of your scientists to work on Gauss Technology as soon as possible.

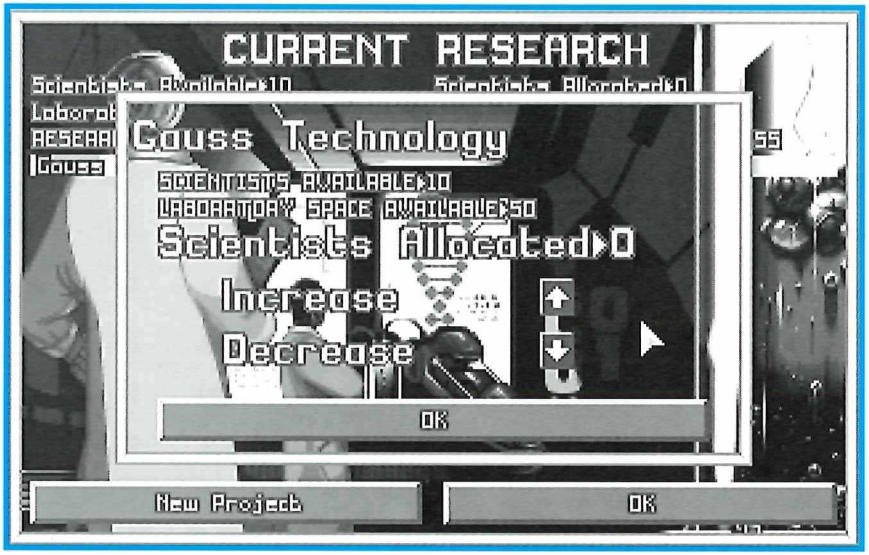


Figure 3.4. The main research screen.

Within a few days of the first game month, you should eventually intercept an alien submarine and send aquanauts to the crash site. If you're victorious, you should capture a number of alien artifacts to add to your base stores, such as Sonic Pulsers and Sonic Weaponry. As soon as you have a Sonic Pulser in stock, start your research efforts toward that item. Similarly, researching Sonic weaponry immediately gives you the ability to use some of the most powerful infantry weapons in the game.

Aliens tend to mostly use Sonic weapons (Sonic Cannon, Sonic Blasta-Rifle, Sonic Pistol) and Sonic Pulsers. This means that you should be able to recover spare Sonic weapons and ammunition from any combat encounter with the aliens.

Recommended Research Order

The items listed below are shown in order of research importance.

1. Gauss Technology*
2. Medi-Kit*
3. Particle Disturbance Sensor*
4. Sonic Pulser**
5. Sonic Weapons** (Sonic Pistol, Sonic Blasta-Rifle, Sonic Cannon, and their appropriate ammo clips)
6. Sonic Oscillator
7. Deep One Corpse**
8. Aqua Plastics
9. Aqua Plastic Armor

** The first three items are the only research topics initially available. As soon as you can research any of the other items on the list (especially the Sonic Pulser), you should immediately stop any unfinished research of the first three items and transfer all your scientists to research the new product.*

*** These items require that you have recovered an actual device before research can begin. (i.e., in order to research a Sonic Pulser you must have a Sonic Pulser in stock.)*

Research Strategies

Strength in Numbers

The more scientists you have working on a project the better; each research topic takes a given number of "scientist research hours" to successfully research. The more researchers you have working on one project, the faster the research topic is revealed.

Economies of Scale

Your research efforts in separate bases are *not* cumulative. In other words, having 100 scientists at one base work on one project yields much better results than having 10 scientists at 10 different bases work on the same project.

Become an "Alienknapper"

A vital part of any successful research effort is the retrieval of alien corpses and captured aliens from the battlefield. To obtain the most powerful weapons and vehicles in the game, you must capture and research high-ranking aliens alive. Indeed, the game *cannot* be won if you don't capture and interrogate a number of high-ranking aliens, most notably a Lobster Man Commander and Navigator. For more information on capturing aliens alive, see Chapter 6, "Tactical Combat."

Work Ethic

Like your technicians, you should *always* keep your scientists as busy as possible. Research priority items first (for example, Sonic Pulsers, Sonic Weapons, and Plastic Aqua-Armor) then move down the list of available research topics. If you've researched all the topics currently available—and you don't expect to get any new research topics anytime soon—sack all of your scientists and instead hire more technicians.

Successful research seems to provide a small increase to your "score" for the month (see Chapter 1). Bigger research topics (for example, the M.C. Generator) generally add more points than smaller ones (for example, the Medi-Kit). Keep in mind that the point bonus isn't much, but when you're fighting for your life against the aliens, every little bit counts!

Capturing Aliens for Research

One of the most important aspects of the research process is the interrogation of living alien subjects. Without capturing and studying the correct aliens, you will never be able to finish the game. For a list of the most useful aliens for research, see Table 3.2.

Table 3.2. Important Aliens Used In Research.

Alien	Usually Found In	Needed For
Calcinite (corpse)	Terror sites, base defense	Vibro Blade
Deep One (corpse)	Terror sites, base defense	Aqua Plastics, Plastic Aqua-Armor
Any Terrorist (alive)	Terror sites, base defense	Alien Origins, M.C. Lab
Tasoth (alive)	Alien colonies, artifact sites, many USOs	M.C. Disrupter, M.C. Generator

Alien	Usually Found In	Needed For
Lobster Man Navigator (alive)	Alien colonies, very large USOs	Ultimate Threat, Transmission Resolver, Alien Sub Construction, Magnetic Ion Armor
Lobster Man Commander (alive)	Alien colonies, very large USOs	Latest flying sub, T'leth: The Alien City

At press time, MicroProse was promising to release a program patch which will fix many of the minor problems with the research tree, along with several other minor "bugs" in the game. Turn to Chapter 12, "Troubleshooting," for information on obtaining the latest version of the game.

Combat Tactics

Capturing aliens alive takes a different tactical plan than most missions do. In most combat missions, you'll normally do everything possible to kill the aliens you encounter as quickly as you can. When you're trying to capture aliens alive, some different tactics are called for. See the steps listed below for some "alien-napping" advice.

You can easily identify whether an alien has been killed or knocked unconscious by listening to the sound it makes when it is wounded and collapses to the ground. If it makes any noise at all (usually a painful wailing noise, although the sound is different for each alien race) then it has been killed. If the alien falls without making any noise at all, then the alien is stunned or unconscious.

1. Build alien containment facilities.

   Even before you attempt your first capture of a live alien, make sure that your bases have a functional alien containment center. Alien containment centers can become clogged with aliens if you're not careful, so you may have to periodically build new alien containment facilities or build more facilities at another base.

2. Use Thermal Tazers and Thermal Shok Launchers to stun aliens.

   Although aliens are sometimes knocked unconscious during combat, the only way to ensure that you'll be able to capture the alien alive is to specifically stun them. The Thermal Tazer and the Thermal Shok Launcher are specifically designed for this task, so use them as much as possible.

3. Use pistols as your secondary weapons.

   If you do have to carry a weapon which can actually inflict damage on the aliens, try to limit yourself to using sonic pistols, Gauss Pistols and dart guns. These modest weapons don't do very much damage, but they may do enough to knock a wounded alien unconscious instead of killing it.

4. Avoid using explosives.

   Even though you may have stunned an alien successfully, using high-explosives — such as sonic pulsers, grenades and disrupter pulse bombs — in the vicinity of the sleeping alien may end up killing it.

5. Grab and run.

   If your mission is to capture only one alien of a certain rank, don't waste time fighting all the other aliens in the combat zone. If you're out to capture a live Tasoth, for example, stun the first one you come across with a Thermal Shok bomb. Next have one of your strongest aquanauts go over to the snoozing alien, pick it up, then race back to the transport. Quickly retreat all of your troopers back into the transport, then abort the mission.

For general tactics and suggestions on combat, turn to Chapter 6, "Tactical Combat."

You can normally find out what rank an alien is by using an M.C. reader to identify each alien you encounter. (See Chapter 10, "Molecular Control.") If an M.C. reader is not available, you can identify stunned and killed aliens by having a soldier stand on the fallen alien. Access the aquanaut's equipment screen, and you should see the alien lying on the ground. Left-click on the alien, and you'll immediately know if the alien is dead or alive. For example, a dead Aquatoid would be described as an "Aquatoid Corpse." An unconscious Aquatoid would be described by using race followed by rank, such as "Aquatoid Medic."

4

Detecting and Intercepting USOs

When you begin playing TFTD, one of the first things you must do is intercept Unidentified Submersible Objects (USOs). Interception may be both the first contact *and* the first combat you actually have with the alien invaders, and it remains an important task throughout the entire game. Basic interception is fairly straightforward: when an Alien USO is detected by sonar, your interceptor pilots will try to engage it and sink it. Depending on the type of USO and the potency of the interceptor, the USO will be either destroyed or downed. Both of which can be positive results.

Although destroying USOs is preferable to not intercepting them at all, the best interceptions will leave behind a downed alien craft. A successful visit to a crash site can be instrumental in advancing your research efforts and aiding your accounting balance. Your soldiers will gain skills, possibly recover live alien leaders for interrogation (especially on larger ships), and recover a nearly intact USO and all its materials. Selling this "booty" can bolster your cash stores more quickly than merely relying on the funding of friendly nations. (See Chapter 3, "Money, Manufacturing, and Research.")

In this chapter you'll review the basics of USO detection and interception and discuss a variety of strategies and tactics. You'll also take a closer look at X-COM interceptors, alien submarines, engaging in ship-to-ship combat, and implementing patrols.

Detecting USOs

Before you can launch interceptors you must first detect the presence of enemy subs. Apparently alien submarines generate more noise than even the noisiest of modern submarines. With even the most basic of earthly technologies at your disposal (such as the standard sonar included with your first base), you'll begin detecting alien craft. Detection of USOs comes from two primary sources: detection devices and X-COM craft. These methods are discussed in more detail in the following sections.

Detection Devices

Sonar devices in TFTD are based on the same technology found aboard modern submarines. By listening to acoustics in the water, the sonar can determine if an object inhabits an area of the sea. Standard sonar has a five percent chance of detecting an alien craft every ten minutes (see Figure 4.1).

The device is good for spotting alien activity; however, it cannot tell you much about the alien craft, except its general size and location. The transmission resolver is a far superior detection tool. Unfortunately, the transmission resolver needs to be researched before it can be constructed at an X-COM base.

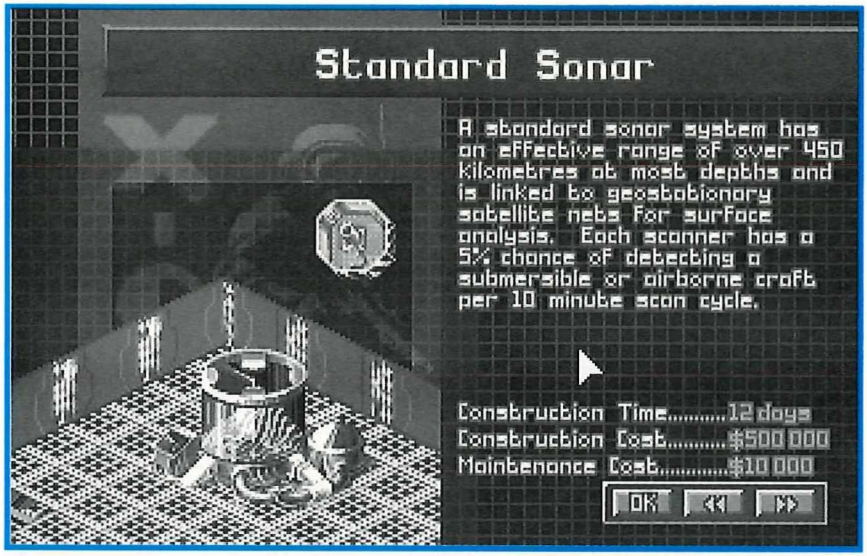


Figure 4.1. Standard sonar.

To be effective in the early part of the game, you may want to invest in a wide array sonar (see Figure 4.2). In general, most X-COM veterans feel that an overlapping series of standard and wide array sonar facilities gives you the best chance to detect alien subs. Unlike the transmission resolver—which automatically detects 100% of all USOs within range—both standard and wide array sonar only detect a small percentage of alien subs within range. The effect of adding more sonar facilities is cumulative: the more sonar you have, the greater your chances of detecting a USO.

Figure 4.2. Wide array sonar.

Equivalent to the hyperwave decoder in the original X-COM, the transmission resolver is the ultimate detection tool. Unlike sonar, the transmission resolver automatically detects *all* enemy subs within its operating range (see Figure 4.3). In addition, the transmission resolver provides you with a wealth of other information on the alien vessel, such as the exact ship type, the type of aliens onboard, and its current mission.

Because the transmission resolver is 100% effective and has a much wider range than either of the sonar detection systems, you can scrap your sonar facilities as soon as your transmission resolver is operational.

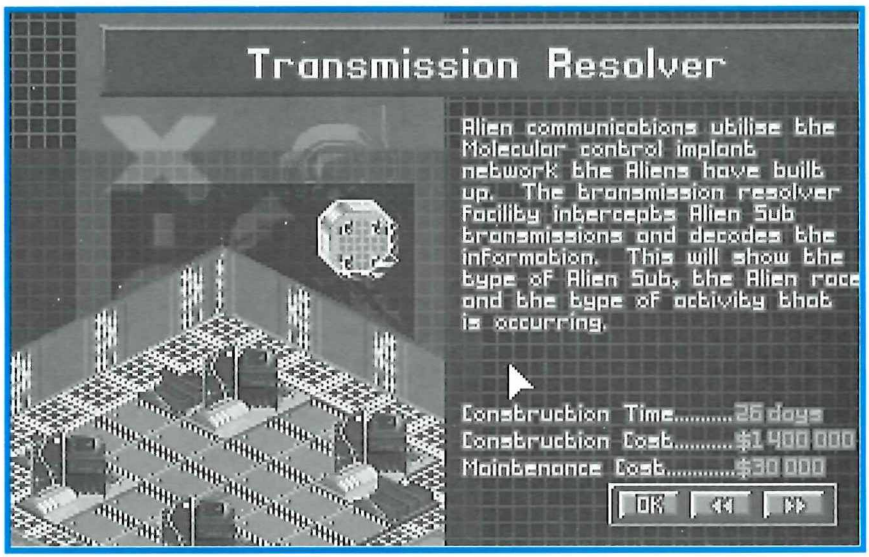


Figure 4.3. Transmission resolver.

Using Multiple Detection Devices

How many detection devices should you build? The answer depends a lot on your strategy. If you want to have a very small number of bases, you may need to build multiple large sonars to increase their effectiveness. Each sonar adds roughly ten percent to the chance that a USO will be detected within range. Remember too that each sonar added also increases the maintenance costs of your base. If you build more than one base, however, and place the bases strategically, one large sonar at each should be sufficient in detecting alien life.

Detecting USOs with X-COM Craft

Although your base sonar facilities and the transmission resolver are your primary tools for detecting USOs, X-COM craft have a limited detection range of their own. If an enemy

USO moves close to an X-COM craft, it appears on the Geoscape screen just as if your base sonar detected it. The detection range of X-COM craft mostly comes into play if you've ordered an interceptor to chase down a USO that has eluded detection and slipped out of the detection range of your base sonar facilities.

X-COM Craft and Craft Weapons

In the original X-COM, aliens came from outer space and X-COM pilots flew land-based airborne interceptors to attack them. In TFTD, your interceptor pilots navigate flying submarines and attack alien ships underwater.

X-COM Craft

The TFTD UFOpedia describes interceptors and craft weapons that are currently available. Still, it helps to understand each craft in further detail and the roles each plays in your overall game strategy.

The most basic interceptor craft of TFTD is the Barracuda, a small fighter that is actually leased equipment (X-COM must pay a monthly fee to use this craft). Fast enough to intercept all but the speediest of USOs, the Barracuda is the backbone of your interception efforts (see Figure 4.4).

The Barracuda comes equipped with advanced craft weaponry, it can be a productive interceptor throughout the game, and has incredibly low operating costs. Every new TFTD game begins with two Barracudas at your disposal.

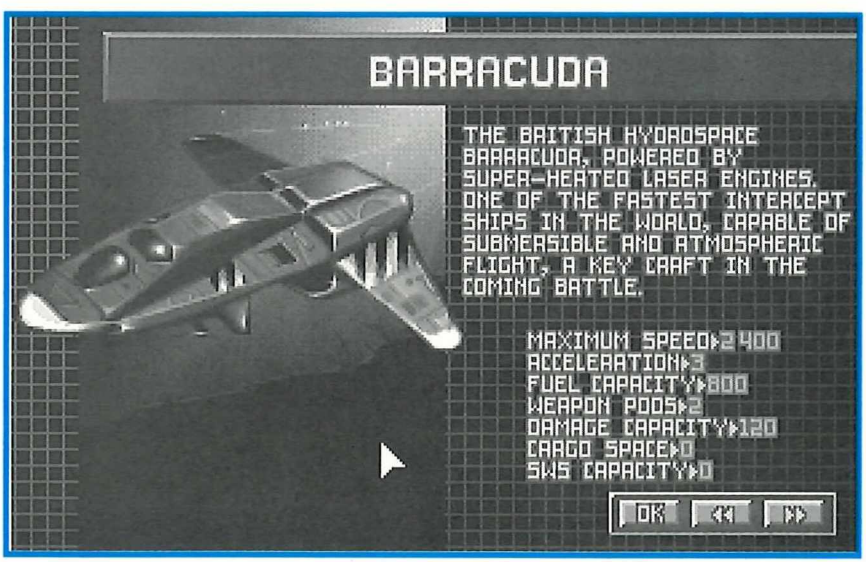


Figure 4.4. Barracuda.

Like the Barracuda, the Triton is a leased craft. It has no offensive capability, so it cannot shoot down enemy vessels. It is the most common transport craft and is—for most of the game—the only craft available to transport your aquanauts to the battlefield (see Figure 4.5). Even if you've managed to research and build the Hammerhead fighter/transport, the Triton remains the transport of choice. The Hammerhead cannot carry any SWS platforms, and it can only transport a total of twelve aquanauts (compared to fourteen soldiers in the Triton).

Figure 4.5. Triton.

The Manta is a sleek fighter sub with excellent acceleration, and it's the first new craft you can build after you've successfully researched alien sub technology.

The Manta takes a considerable amount of time to research and build, but it's better armored and much faster than the Barracuda. Its key drawbacks are its reliance on the rare element Zrbite for fuel and a relatively short range (see Figure 4.6).

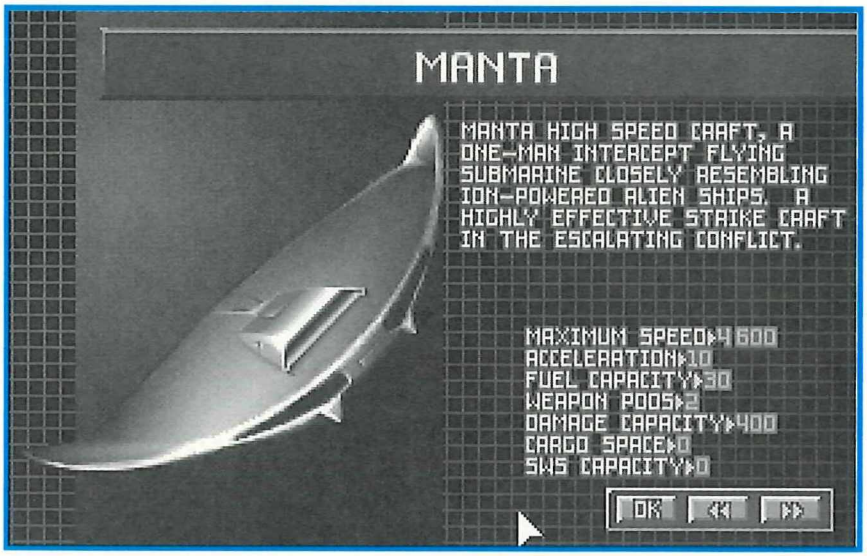


Figure 4.6. Manta.

The Hammerhead is the second submarine developed from alien technology and is a study in compromises. It is armed and can shoot down USOs, but carries only one weapon pod. The Hammerhead includes a cargo area, although it can hold only twelve aquanauts and cannot carry any SWS platforms.

However, with a sonic oscillator and complement of twelve aquanauts it can deftly handle most USOs and offers quick response to terror sites. The Hammerhead also has the best cruising range of all the advanced interceptors. With more than twice the armor of a Manta, it can be used as a battleship killer, although it will suffer some damage (see Figure 4.7).

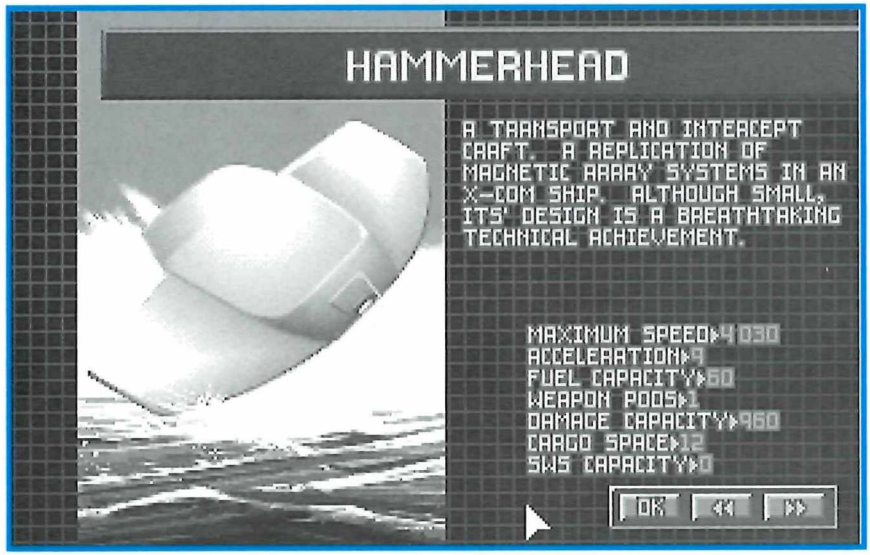


Figure 4.7. Hammerhead.

The Leviathan is the ultimate X-COM craft (see Figure 4.8). This engineering wonder has it all—offensive strength with two hard points, defensive strength with the best armor available in the game, a huge cargo area, and engines that can outrun even the fastest alien battleships and dreadnoughts. Most importantly, it is the only sub capable of withstanding the tremendous water pressure surrounding the alien city of T'leth, which is the final mission of the game.

Figure 4.8. Leviathan.

Table 4.1. X-COM Craft Summary.

Craft	Type	$Cost	Time	Vmax	Accel	Fuel	Damage	Hardpt	Cargo	#SWS
Barracuda	F	600,000*	96**	2400	3	800	120	2	0	0
Triton	T	500,000*	72**	790	2	1400	160	0	14	3
Manta	F	600,000	18,000	4600	10	30	400	2	0	0
Hammerhead	F/T	400,000	14,000	4030	9	60	960	1	12	0
Leviathan	F/T	900,000	34,000	5800	9	50	1250	2	26	4

Type—Type of flying sub, either Fighter (F), Transport (T), or both (F/T).

$Cost—Cash required to initially purchase the craft.

Time—Technician-hours required to build the craft.

Vmax—Maximum speed.

Accel—Acceleration.

Fuel—Fuel capacity.

Damage—Damage capacity or armor level of the sub.

Hardpt—Hard points, or the number of places a weapon can be mounted on the sub.

Cargo—Number of cargo spaces on the craft.

#SWS—Maximum number of submersible weapon systems the craft can carry.

**The cost amount listed is the initial purchase price and the monthly fee charge to rent the craft.*

***The time value is the time (in hours) it takes for the craft to arrive at your base after it has been purchased.*

Table 4.2. X-COM Craft Comparison.

Craft	Pros	Cons
Barracuda	Does not use Zrbite for fuel. Inexpensive. Immediately available. Has large fuel capacity. Dual hard points.	Slow compared to medium and large alien subs. Poorly armored. Monthly lease costs. Cannot dive as deep as some USOs.
Triton	Does not use Zrbite for fuel. Inexpensive. Immediately available. Has extremely large fuel capacity. Large cargo capacity.	Slowest craft in the game! Poorly armored. Monthly lease costs. No hard points for weapons—unarmed.
Manta	Excellent acceleration. Operable at deep depths. High speed. Dual hard points. Well armored. Short range.	Uses Zrbite for fuel. Expensive and time-consuming to manufacture. Requires research to develop.
Hammerhead	Very good acceleration. Operable at deep depths. High speed. Well armored. Medium cargo capacity.	Uses Zrbite for fuel. Cannot carry SWS platforms. Expensive and time-consuming to manufacture. Requires research to develop. Only one hard point. Short range.
Leviathan	Excellent acceleration. Operable at very deep depths. Very high top speed. Very well armored. Dual hard points. Large cargo capacity. Fastest craft in the game.	Uses Zrbite for fuel. Very expensive and time-consuming to manufacture. Requires research to develop. Short range.

Craft Weapons

Crucial to your interception success is the weapon load of your interceptors. Long-range weapons allow your interceptors to engage alien USOs with impunity, translating into damage-free interceptions. This is important because repair times can be lengthy (see repair section later in this chapter).

The Ajax is the weakest torpedo weapon in your inventory (see Figure 4.9). At the beginning of the game, this is one of the few weapons at your disposal, so it can be used early against small USOs.

Figure 4.9. Ajax.

A Depleted Uranium Pellet head torpedo is classified as a medium-strength weapon (see Figure 4.10). It offers a solid boost in strength and range over the Ajax, and is a good weapon to use until better ones are developed.

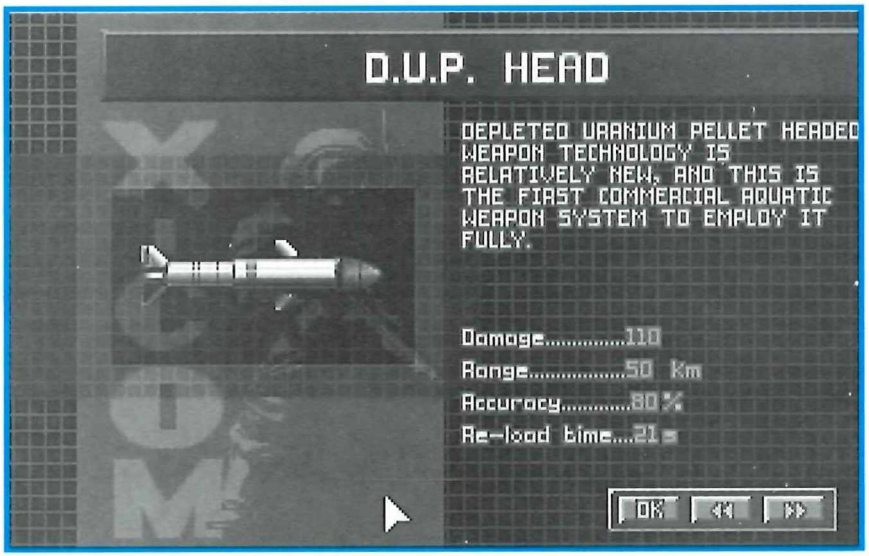


Figure 4.10. Depleted Uranium Pellet (D.U.P.) head torpedo.

The Pulse Wave Torpedo is an alien technology based torpedo that is only available after it has been researched (see Figure 4.11). The PWT has the longest range and damage capacity of any weapon in the game. It is also very accurate, but is crippled by its limited amount of ammunition (only two torpedoes per launcher) and its high manufacturing cost.

Figure 4.11. Pulse Wave Torpedo (PWT).

At the beginning of the game, the Craft Gas Cannon is the only craft cannon available to your team (see Figure 4.12). It's better than being unarmed, but not by much. This weapon has poor accuracy, generates little damage, and must have ammunition purchased for it. Its only redeeming feature is that it is the only weapon that can be used to regularly down—not destroy—tiny alien survey ships. Otherwise, bypass this lemon and get more powerful craft weapons immediately.

Figure 4.12. Craft Gas Cannon.

The Gauss Cannon is a better cannon weapon than the Gas Cannon, but it's still relatively weak (see Figure 4.13). It provides your interceptors with a safer operation envelope against most small- and medium-sized ships, but still leaves you very vulnerable to larger USOs. It also requires research to build.

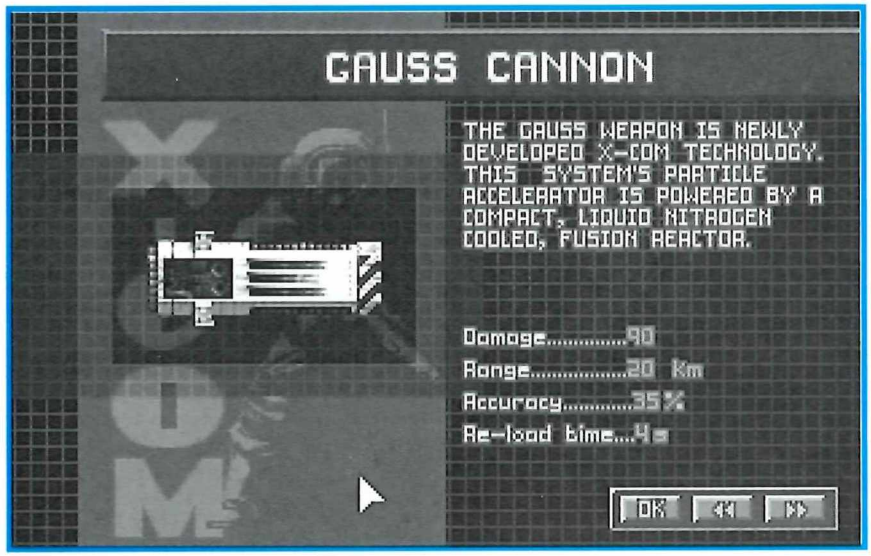


Figure 4.13. Gauss Cannon.

The Sonic Oscillator is the best craft weapon in the game (see Figure 4.14). It packs tremendous punch and has the longest reach of any cannon, rivaling the firing range of the PWT. It can fire up to 100 times before it needs to be recharged, and the only cost to rearm is exacted in time.

An interceptor equipped with Sonic Oscillators can intercept all alien subs—with the very notable exception of the dreadnought—without much chance of damage by return fire. Its only drawback is that it can easily destroy small USOs, which prevents their subsequent capture.

Figure 4.14. Sonic Oscillator.

Table 4.3. X-COM Craft Weapons.

Weapon	Damage	Range	Accuracy	Reload Time	Ammo Load	Ammo Cost
Ajax	60	32	70	17	6	3000
D.U.P.	110	50	80	21	3	9000
PWT	200	60	100	28	2	28,000
Gas Cannon	15	8	25	3	100	1240
Gauss Cannon	90	20	35	4	50	200
Sonic Oscillator	150	55	50	5	100	0

Preparing Your Barracuda Interceptors

At the outset of any new game, you have two Barracuda interceptors at your disposal. These are very basic flying subs that have little armor and offensive capability. Even before detecting your first USO, you should take some steps to improve the Barracuda's overall attack strength.

First, select the **EQUIP SUBMARINES** button on the Bases screen button bar. Select an interceptor and replace the Ajax torpedo launcher with the Depleted Uranium Pellet (D.U.P.) head torpedo launcher. The D.U.P. head torpedo has a range far superior to that of the Ajax, and until better cannons can be researched and manufactured, it is your best interceptor weapon. It has enough power and range to take on the small- and medium-sized USOs until you have new technology.

You may be tempted to put another D.U.P. launcher on the Barracuda's remaining wing pylon; however, this armament strategy has some drawbacks. The major shortcoming of the D.U.P. launcher is that it can only carry a maximum load of three torpedoes. When engaging in an aggressive attack, three torpedoes will be expended very quickly, leaving your interceptor totally defenseless. It is advisable to have a weapon with more ammo capacity to balance out the limited ammo load of the D.U.P. launcher.

In addition to the problem of quickly running out of ammunition, two D.U.P. launchers on a single interceptor will fire in unison. Simultaneous hits from two torpedoes may completely destroy smaller USOs, leaving nothing for your squad to recover. Another option is to put a D.U.P. launcher on one wing and an Ajax launcher on the other. Still, your Barracuda is vulnerable because the Ajax is limited to six torpedoes.

Lastly, apply any changes to a single interceptor at a time. After designating a new weapon load, the interceptor in question becomes inoperative during the rearming phase. Leave the other Barracuda alone until the modified one is ready for action. At any given moment, you will have at least one interceptor to mobilize.

To keep your Barracudas at maximum readiness, purchase a hefty supply of D.U.P. head torpedoes. Remember that at the beginning of a game, you're only given 1 D.U.P. launcher. You must purchase the rest. It's very easy to get sidetracked in research and aquanaut management and forget about ordnance stores. If an interceptor must battle a USO with only one or two torpedoes and no cannon, it is nearly helpless. Conversely, when older equipment is retired, remember to sell it and its ammunition. This brings in some cash and frees up valuable space in your stores for all the alien artifacts you "inherit."

Alien USOs: Unidentified Submersible Objects

Knowing your own technology and capabilities is only half the intelligence battle. Knowing the aliens and their technology will give you an edge in protecting your interceptors from destruction or damage. Understanding the different types of ships and their mission profiles will help you focus your attention on the most important interceptions.

Alien Submarines

The Survey ship is the smallest and only unarmed ship in the alien fleet. It's also the slowest and least armored, which hardly even poses a threat to the basic Barracuda. Feel free to use these frisbees for target practice and some cheap points.

According to the UFOpedia, the Survey ship's significance is to signal the possible influx of more ships to an area over the next few months if it finds a suitable site for an alien base (see Figure 4.15). In practice, transmission resolvers in our games claim these ships are used as multi-role craft and perform a number of missions. Ludicrous as it may seem, this ship has even been seen with orders to engage in floating base attacks and resource raids.

Figure 4.15. Survey.

Barely larger than the Survey ship, the Escort finds suitable targets for the larger ships that follow (see Figure 4.16). It is armed, but still very weak and virtually harmless to your interceptors. It is fast enough, however, to evade interception by Barracudas. Like the Survey ship, it can be used for a variety of missions.

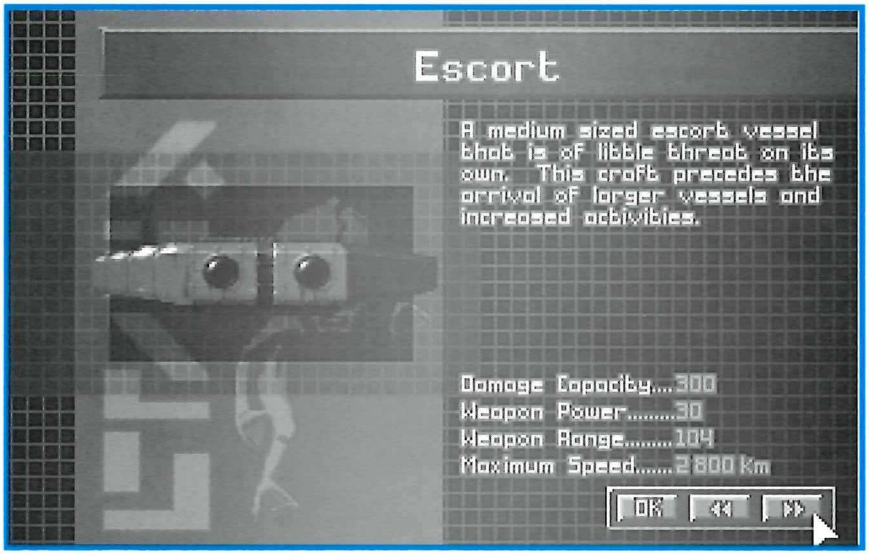


Figure 4.16. Escort.

The Cruiser is a multi-role general purpose craft. It's relatively easy prey for all interceptor types with long-range torpedoes or cannons (see Figure 4.17). This is a very common multi-role ship; it has been spotted in nearly all of the possible alien mission types.

Despite being fast enough to outrun Barracudas, the pilots of this ship tend to be overly confident and will commonly meet an engagement rather than flee—their loss!

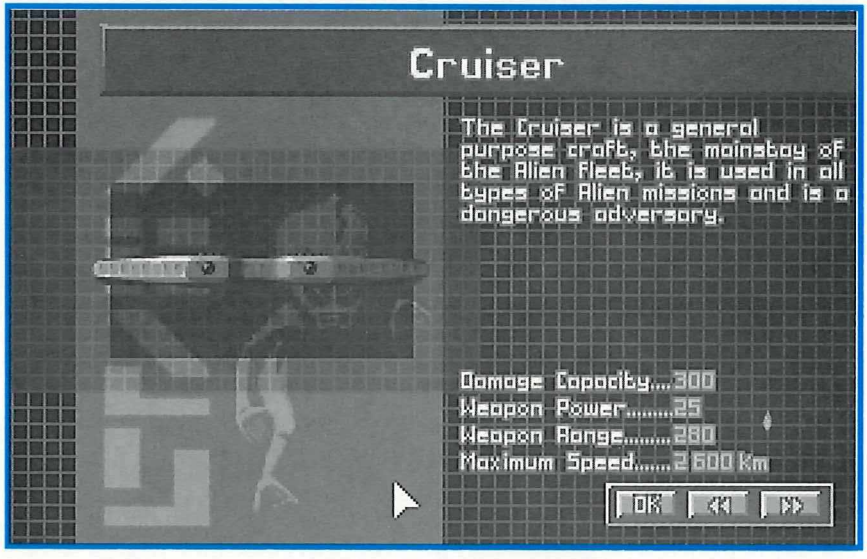


Figure 4.17. Cruiser.

For some unknown reason, the Heavy Cruiser is seen less often than other ships. It is used for different missions and is stronger than the Cruiser, but still no match for a well armed X-COM ship (see Figure 4.18).

The Hunter ship is the second fastest alien craft and is used primarily for resource raid missions (see Figure 4.19). Fortunately, this ship is lightly armed and can be handily subdued with any interceptor using a strong weapon.

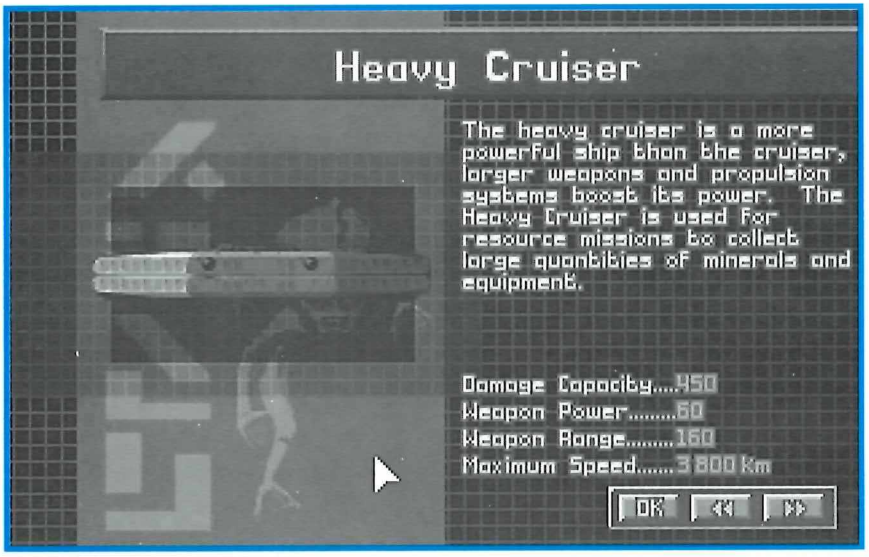


Figure 4.18. Heavy Cruiser.

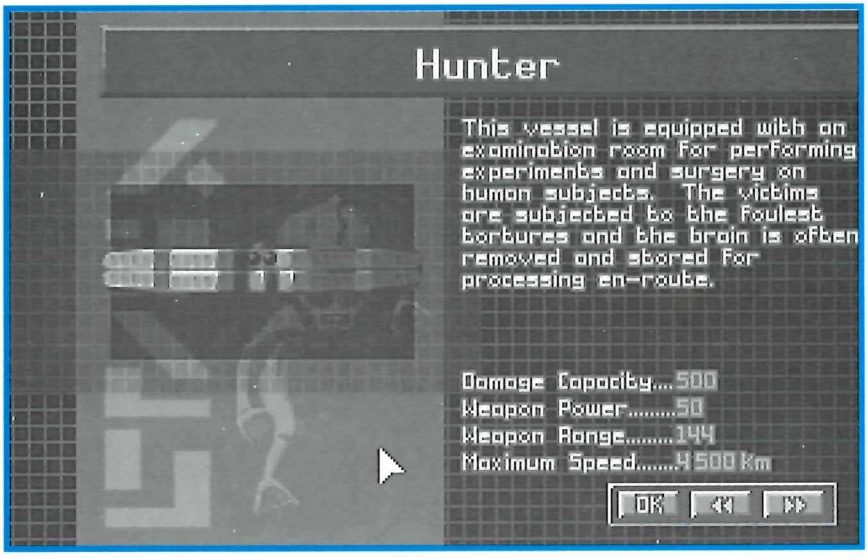


Figure 4.19. Hunter.

The Fleet Supply ships are the cash cows of X-COM (see Figure 4.20). After you obtain the sonic oscillator, knocking out these swimming treasure chests becomes a rote task. Used by aliens to carry large loads of supplies to alien colonies, you will see quite a few of them by the end of the first year of X-COM operation.

Fleet Supply ships are speedy enough to evade confrontation, but if your interceptor can damage them with a few initial hits, then they fall quickly. Although the ships are well armored and reasonably armed, they do not attack very aggressively at the lower difficulty levels and their weapon reach is considerably shorter than a Battleship's. Aliens use this ship mainly for colony supply and colony expansion missions. With three levels and a large cargo area, this USO stores large quantities of Zrbite and aqua plastics to be found by your recovery teams.

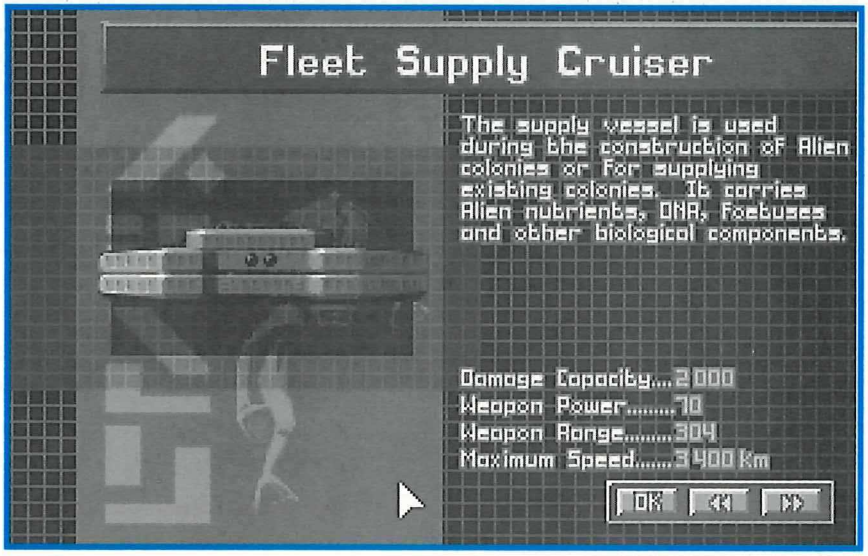


Figure 4.20. Fleet Supply.

With the Battleship, the aliens finally have a weapon that can strike fear into the hearts of the X-COM interceptor pilots (see Figure 4.21). Fast and well armed, it is the ship aliens use for floating base attacks and surface attacks. If you see a surface attack mission listed by the transmission resolver, try to intercept this ship quickly or at least be prepared for a possible terror mission.

Although it's powerful offensively, the Battleship's weapon ranges are still shorter than those of the Sonic Oscillator. So even a Barracuda equipped with the oscillators can attack a Battleship—if it can catch it. In most cases, the Battleship can outrun the slower interceptors.

The Dreadnought is similar to the Battleship. It has nearly the same weapon strength and mission type, but has superior weapon range, speed, and armor (see Figure 4.22). Aliens use this ship primarily for floating base attacks, although it can be used for colony expansion and interdiction as well.

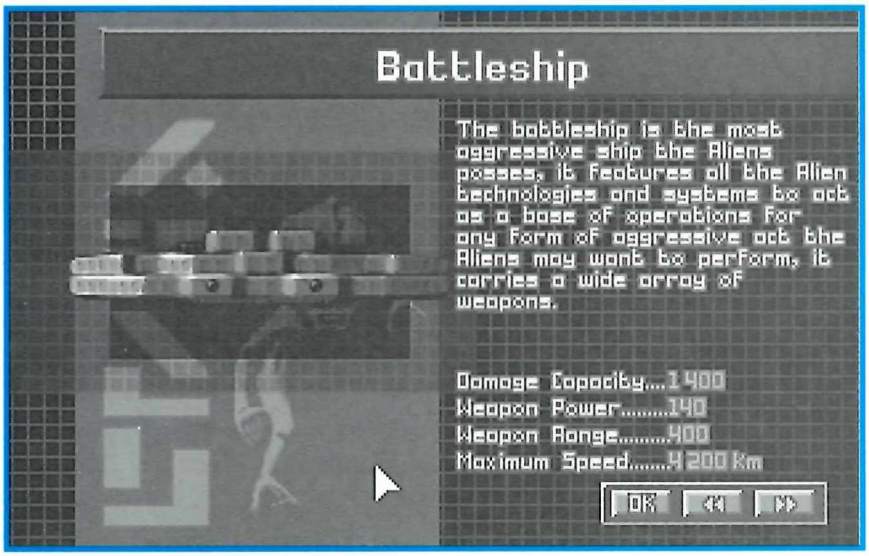


Figure 4.21. Battleship.

The Dreadnought is the only vessel that can outrun the Mantas, so if you need to intercept one on a floating base attack mission, use a Leviathan. Usually the Dreadnought will destroy any of the light fighters, although in some cases, Mantas armed with two Sonic Oscillators have knocked them down and taken only moderate damage. Barracudas? Maybe, if you use more than one and get lucky. This is the only ship that can *always* defend itself, even against the Sonic Oscillator.

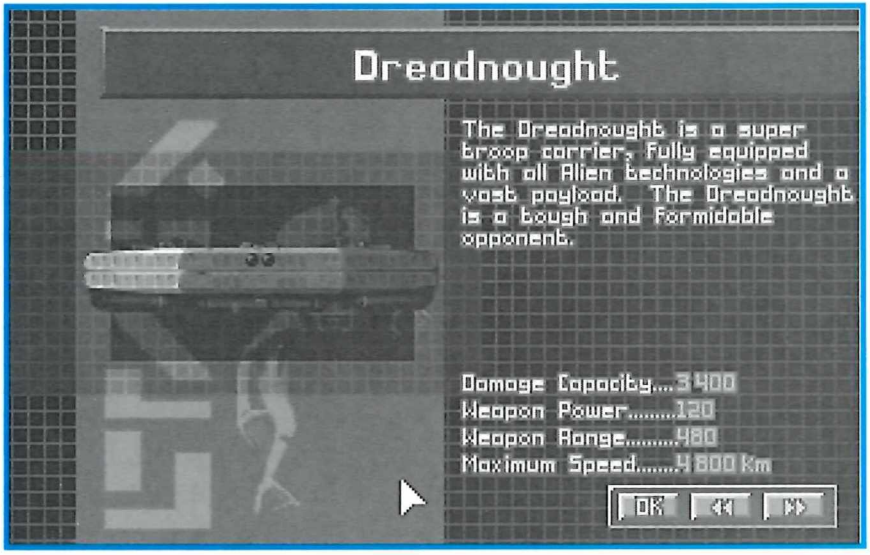


Figure 4.22. Dreadnought.

Table 4.4. Alien Submarine Summary.

USO	Weapon Power	Weapon Range	Vmax	Hull	# Crew	Common Mission	Size
Survey	0	0/0	2000	60	1*	Multi-role	Very small
Escort	30	104/13	2800	300	2-6*	Multi-role	Small
Cruiser	25	280/35	2600	300	6-13*	Multi-role	Small
H.Cruiser	60	160/20	3800	450	8-11*	Interdiction	Medium
Hunter	50	144/18	4500	500	10-15*	Resource raid	Medium
Fleet Supply	70	304/38	3400	2000	11-20*	Supply and expansion	Large
Battleship	140	400/50	4200	1400	15-22*	Surface attack, infiltration	Large
Dreadnought	120	480/60	4800	3400	15-22*	Base attack, expansion, interdiction	Very large

**These are rough estimates.*

Alien Mission Types

The aliens use their flying subs for any of eight mission types. Some of these missions are exploratory or planning missions which you may choose to ignore if your X-COM organization is worrying about other important tasks. Others are more serious and should be attended to as soon as possible, if not immediately.

Probe

The probe mission is one in which the alien ship is exploring a geographical area for possible colony settlement. Usually, a Survey ship is used for this procedure and this mission can easily be intercepted for some easy points. It is not a crucial mission, however, and missing an interception should not greatly influence your score.

Interdiction

The UFOpedia describes this mission as the next stage in exploration, after a suitable colony or activity site has been found. During an interdiction, aliens bring a larger contingent of troops to clear and secure the area.

Infiltration

These missions are truly diabolical and will affect X-COM funding. By influencing an earth government, the aliens can convince them to sign contracts that dictate a stop to that country's contribution to X-COM. Usually, allowing a few of these missions is not enough to lose the country immediately, but a series of infiltrations combined with poor X-COM performance in that country are signs to watch for. In some cases a government may suddenly withdraw from the X-COM coalition, but in most cases your monthly funding report shows you who has been reducing their funding. These clues tell you that interceptions need to be escalated in a particular country.

What happens on infiltration missions? The game addresses this vaguely, and implies that alien technology is offered to the government in exchange for cooperation. Infiltrations probably involve the transport of alien diplomats to secret meetings with corrupt politicians. Willing to exchange their citizens' souls for monetary or positional favors in a new green regime, the politicians gladly agree to pacts with the aliens that will trigger the demise of the perceived threat of X-COM.

Infiltration missions are definitely worth intercepting. The fewer missions in which the aliens can succeed, the better X-COM's chances are for keeping the nation on friendly terms. Unlike the terror missions, your ground troops are not given an opportunity to salvage an alien attempt at this mission. If the USO gets by your interception and lands, it finishes the mission clandestinely and you cannot stop it.

Surface Attack

These missions, like infiltration missions, are very important to X-COM. A developed surface attack mission, according to the UFOpedia, is one which becomes a terror scenario. The aliens, in need of human fodder for their experiments, attack island towns or ships and kill or capture the civilians.

In some cases, X-COM will be notified and will have the opportunity to save some civilians from unspeakable horrors. If you see a ship with this mission profile before it lands, however, you can save yourself some effort by shooting it down before the terrorism begins.

Colony Supply

Most commonly, Fleet Supply ships and Dreadnoughts are seen carrying out these missions. The aliens use this mission to supply the colonies they have established on earth. The effect of successful interception of these missions is unknown. From a practical standpoint, one must assume X-COM would be damaging the alien colony in some way by stopping its supply; however, there are no indications in the game to confirm this.

Instead, you can take advantage of the profit value these missions represent. Because large ships usually perform the missions, a successful interception and recovery will earn a respectable quantity of alien corpses, artifacts, and in particular Zrbite and aqua plastics.

Colony Expansion

This mission is one in which the aliens bring supplies to construct or expand a base. Very similar to the colony supply missions, there are few indications to describe how valuable an interception is. However, the ships usually flying these missions will offer a solid booty to the X-COM player.

Floating Base Attack

When aliens feel X-COM's interception activity has become irritating, they initiate floating base missions to counter the threat. All types of alien subs have been seen performing this mission, although Dreadnoughts appear to be most commonly assigned.

The aliens supposedly do not know where your base is when they begin these missions. Usually a craft will fly near an area where X-COM craft have been active and attack if they find a base. This is very much the reverse situation of when X-COM ships see heavy alien traffic in an area, and then fly patrols to find the alien base. However, there may be some cases where the attack is planned in the game's progression.

In one test, a saved game was replayed numerous times. During the game play an attack occurred at one base at the same time each time the game was replayed. It might have been that a scout earlier detected the base and sent information to the Dreadnought, or it could have been that the game cheats; this would not be the only instance where cheating has been detected!

If you see a Dreadnought with this mission profile getting close to your base, prepare for action. If you have a Leviathan, attempt to intercept the ship before it finds and reaches your position.

Resource Raid

On this mission, alien ships try to acquire any number of raw materials or resources from the earth. They may raid mineral sites or any other resource-rich location. One curiosity about these missions: according to the UFOpaedia, the aliens may even seek man-made items. These particular excursions may be the terror missions, where aliens capture humans for their biological experiments.

Engagement

With your interceptors ready and armed, all that remains is for the detection devices to do their work. A message window pops up when an alien ship is detected. If it's detected by a transmission resolver, a host of information will be available on the craft, but even if it's detected by sonar, the least you will know is the size of the alien ship. This is the most crucial information you need when deciding whether to scramble the interceptors.

Early in the game, launch against all very small targets. You may be too weak to handle the larger ships, and even if you could down them, your aquanauts would be in for a long recovery. Alien Escorts and Cruisers are all you encounter initially. Against these targets, a single interceptor armed with D.U.P. torpedoes should suffice.

Another factor to consider is the location of the alien. The countries funding the X-COM effort all base their contributions on their perception of how well you are defending its territories. Like the members of any political group, each country is geocentric and self-ish about its concerns. The Japanese are unconcerned with how well your team has recently defended Africa, France, and Canada in terror missions; if X-COM ships have been absent from Japanese oceans while aliens have been plundering the country, Japan will reduce its funding. Specifics on member nation logistics are found in Chapter 6.

The lesson here is to choose the more valuable sea space to defend when faced with multiple targets. Scrambling interceptors can itself be a strategic act when trying to prove X-COM's value to a country. X-COM earns points with a country for each engagement. Some X-COM players will tell an interceptor to follow a USO at standoff range, and then attack it when it has crossed the border of an wealthy nation. You get points for each interception, and you can win even more points with that country by following with a successful recovery. To observe how X-COM is perceived by the world, you can view the **GRAPHS** section from the Menu options.

Still, surviving is your primary concern. Be judicious about interception launches. If your interceptor is outclassed, it will sustain damage or be destroyed. Both of these outcomes diminish your ability to respond to more applicable threats during your down time. As a general guideline, your chances of success are based on the interceptor strength and alien ship type (see Table 4.7). The ratings in Table 4.7 are on the conservative side and assume the player is gaming at X-COM's beginner level.

Squadron Tactics

Novice X-COM players may not be aware that you can send multiple fighters against a USO. If you feel the chances of shooting down the alien ship are risky for a single ship, you can even the odds by using up to four interceptors against the same target. Launching two or more interceptors utilizes the same procedure as launching one. After the first fighter is on its way, click again on your base, select a second interceptor, and give it the same target.

When the first interceptor engages the alien ship, order it to stand off, and then click the upper-left corner of the **ENGAGEMENT** screen. This minimizes the engagement into an icon on-screen while the game time continues to run. Barring an alien escape, the second and any subsequent interceptors you launched eventually catch up to the crowd. When it does tell it to attack, minimize its window, and then call up the other fighter's window and give it the new orders.

If during a squadron attack one interceptor manages to finish off the USO before others arrive, click on the individual interceptors and give them new orders to return to base. This saves you time and fuel.

Multiple interceptor engagements can be a very useful tactic early in the game, but not for every occasion. It is very inefficient to use multiple interceptors unless you have no choice, in which case it is very likely that all the interceptors involved will take damage. When the sea dust settles, you may find yourself with two or three Barracudas all down for repairs and unable to engage in other missions. If the USO is dangerous enough, concentrate instead on more manageable targets. Be patient—it is only a matter of time before you have the opportunity for payback with the Sonic Oscillator.

Table 4.5. X-COM Craft Weapon Load-Out Analysis.

Weapon Loads	Rating
Single or Dual Gas Cannon	Weakest
Ajax Launcher, Craft Gas Cannon	Weak
D.U.P. Head Launcher, Gauss Cannon	Medium
Sonic Oscillator in any combination	Strong

Warning! *Rating only applies as long as weapon is loaded! The sole use of torpedo launchers on any craft leaves the craft unarmed if all torpedoes have been launched and fail to down the alien ship.*

Table 4.6. Weapon Range Comparisons.

Craft/Weapon	Descending Range Order
Dreadnought	480
PWT	480
Sonic Oscillator	440
Battleship	400
D.U.P.	400
Fleet Supply	304
Cruiser	280
Ajax	256
Heavy Cruiser	160
Gauss Cannon	160
Hunter	144
Escort	104
Gas Cannon	64
Survey Ship	0

Table 4.7. Interception Combat Success Grid for Single Interceptor.

X-COM Alien	Survey	Escort	Cruiser	HCruiser	Hunter	Fleet Supply	Battle-ship
Barracuda: weak	Excel.	Fair*	Risky*	Risky*	Risky*	None*	None*
Barracuda: medium	Excel.	Excel.*	Fair*	Fair*	Excel.*	Fair*	None*
Barracuda: strong	Excel.	Excel.*	Excel.*	Excel.*	Excel.*	Excel.*	Excel.*
Manta: weak	Excel.	Good	Fair	Fair	Good	Risky	None*
Manta: medium	Excel.	Good	Good	Good	Excel.	Fair	None*
Manta: strong	Excel.	Excel.	Excel.	Excel.	Excel.	Excel.	Excel.
Hammerhead: weak	Excel.	Good	Fair	Fair	Good*	Risky	None*
Hammerhead: medium	Excel.	Good	Fair	Good	Excel.*	Risky	Risky*
Hammerhead: strong	Excel.	Excel.	Excel.	Excel.	Excel.*	Excel.	Excel.*
Leviathan: weak	Excel.	Good	Fair	Fair	Good	Fair	Fair
Leviathan: medium	Excel.	Good	Good	Good	Good	Good	Fair
Leviathan: strong	Excel.	Excel.	Excel.	Excel.	Excel.	Excel.	Excel.

Excel. (Excellent)—100% chance of success with no damage to X-COM interceptor.

Good—High success probability, alien will be destroyed or downed with little or no damage to interceptor.

Fair—Moderate success; alien will be destroyed or downed with light to moderate damage to interceptor.

Risky—Low success rate; X-COM can down enemy, but will receive at least moderate to major damage.

None—Almost no chance of success; X-COM craft will likely be destroyed or sustain major damage.

**—An asterisk means the alien ship has a higher maximum speed and is capable of escape or of avoiding engagement entirely.*

Grid is based on alien ship type and X-COM interceptor/ordnance mix.

Ratings are based on use of cautious and standard attack modes.

Table assumes player is gaming on beginner level.

X-COM craft are listed (top down) in order of weapon range.

Alien ships are listed (left to right) in increasing order of size and strength.

Adjust accordingly if playing at higher difficulty level where alien ships are more aggressive or if multiple interceptors are used.

Using the Interception/ Engagement Screen

Although simple, the Engagement screen is quite useful and can make a difference in the degrees of success of an interception (see Figure 4.23). Following are descriptions and strategies regarding its use.

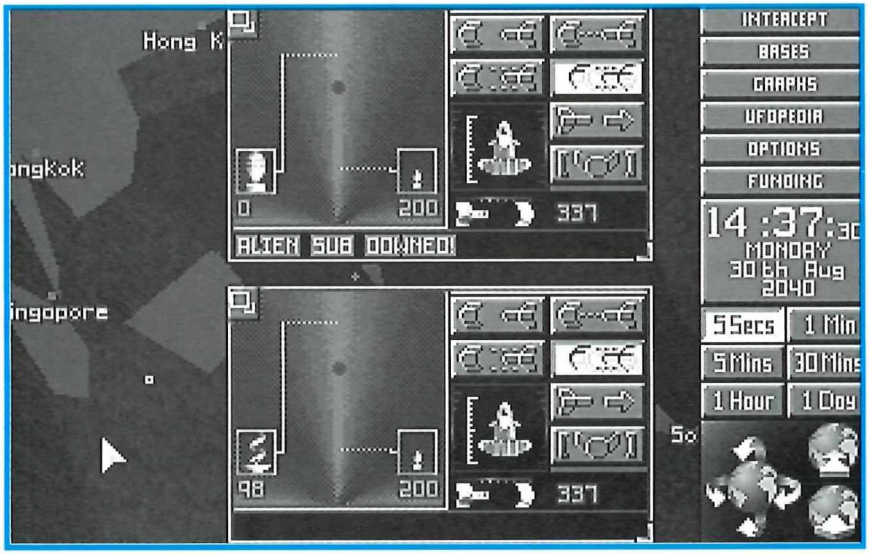


Figure 4.23. Interception/Engagement screen.

Minimize Icon

This icon allows you to designate orders to multiple craft attacking an alien ship. You may also want to minimize the Engagement screen so you can handle other game functions like assigning assaults or base management.

While the screen is iconized, game time continues and you have access to the other menus. Click on the minimized window to bring it to the foreground. This function only works when your interceptor is under standoff orders.

Standoff

The Standoff button orders your interceptor to follow the alien at a safe distance. Use it if your interceptor is waiting for another interceptor to join the fight. If you are hopelessly outclassed, you can use this command to follow the alien and possibly see where it lands. From there, you can call in an aquanaut assault team with the Triton, or patrol

and perhaps discover the location of an alien colony. To keep the game from getting boring during a standoff engagement, you may want to minimize the screen and perform other tasks until something happens.

Cautious Attack

A cautious attack is one in which the interceptor attacks from the maximum range of its best weapon, thereby hopefully reducing the amount of damage taken from return fire. This is an especially good choice to undertake when facing an unfamiliar ship, but there are other benefits as well.

A cautious attack inflicts less damage to an alien vessel than a standard or aggressive attack. If you are interested in recovering as much as possible from a downed ship, use this option. A competent interceptor weapon will pick apart at the alien craft slowly and leave intact as much as possible.

Standard Attack

This orders the interceptor pilot to attack at the maximum range of all available weapons. For example, this means that a Barracuda with a long-range torpedo and a short-range cannon will close on the alien ship until it can fire at it with the cannon.

Aggressive Attack

An aggressive interceptor comes as close to the alien as possible and attacks with all weapons. This method of attack, however, leaves your craft extremely vulnerable to return fire from the aliens! Reports from X-COM veterans claim the aggressive mode is best used when multiple interceptors are fighting harsh odds against an alien Battleship.

Adequately armed interceptors will usually not need to resort to this tactic. Using this option allows your craft to fire with all available weapons, but so does the Standard attack. If you have high-quality, long-range weapons like the Sonic Oscillator or Particle Wave T (PWT), it is safer to use the standard or cautious modes.

Disengage

If the situation is getting too hot and your interceptor is taking a lot of damage, you can click the **DISENGAGE** option to veer off the attack and return to base.

Against an alien ship you know you only have moderate chances of downing it, so be prepared to use this button. A destroyed interceptor is expensive to replace and damaged interceptors are inoperative while they undergo repairs. Fortunately, USOs are not known to pursue interceptors that choose to disengage.

USO Visual

A visual identification of the USO is revealed when this button is clicked. A visual is helpful when your bases have only sonar detection devices and still lack transmission resolvers (see Figure 4.24). Until you utilize strong weapons on your interceptors, it is always a good idea to use this feature when still in Standoff mode. If you see an alien ship you recognize as one that destroyed your last interceptor, you can disengage before taking damage.

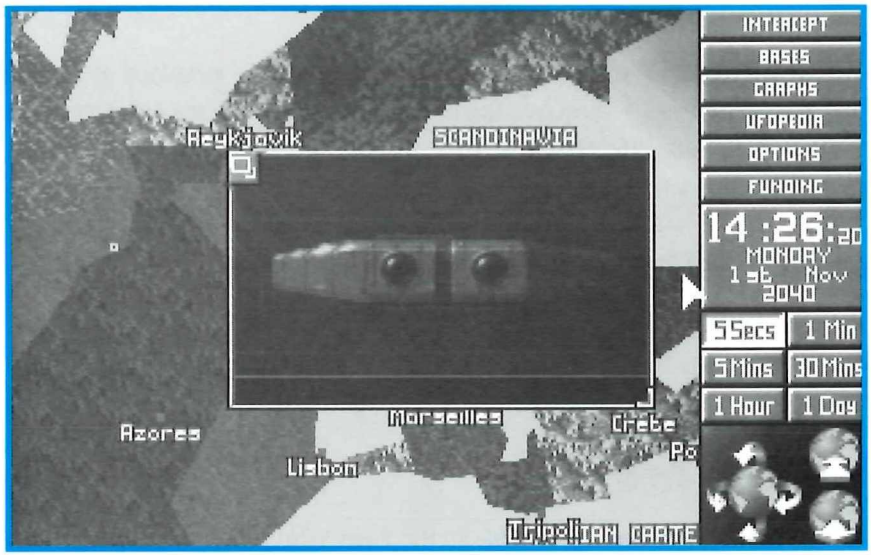


Figure 4.24. USO visual identification.

Damage Indicator

This is a display to record the condition of your interceptor. If your interceptor is hit by alien fire, a portion of it becomes red. As more damage accumulates, the red zone grows larger and eventually covers the sub icon completely if the interceptor is destroyed. This indicator is your clue to disengage if you are outclassed or if a battle is going poorly.

Range Indicator

This area of the screen tells you the current distance between your interceptor and the alien. There are some oddities in the way TFTD gives you information about weapon ranges worth discussing here.

The X-COM craft weapons are given ranges in one type of measurement unit. The alien ships have weapon ratings listed in a different and unknown measurement. This can be confusing when trying to determine if your weapon gives you the capability to strike at a USO without taking return fire. The range indicator on the Engagement screen seems to use the same measurement system as the aliens.

Based on observations, it appears the X-COM craft weapons ranges can be multiplied by a factor of eight to achieve comparable alien distances. For example, when engaged in a cautious attack where the farthest reaching X-COM weapon is the Sonic Oscillator, the interceptor begins firing at a listed range of 440. This is the same as the listed range of 55 times the factor of eight (55*8 = 440).

Knowing this, you can see from the craft weapon ratings table and the alien ship table that only the Dreadnought can shoot back against a strong weapon configuration. Use this fact to your advantage!

Weapon Range/Combat Display Indicator

This indicator shows the reach of your weapons. It also displays the shots fired during combat as they travel toward the target, and the amount of ammunition remaining for the interceptor.

Engagement Strategy

Most of what you need to know to determine whether to intercept a USO or not has been described above in the alien mission profiles and interception success grid.

As the game progresses, you may find yourself deluged by reports of USO activity. By analyzing the nature of the alien intent, you can decide whether to intercept based on your strategy's priorities. The country the alien is active in will also be a factor in your decision. Finally, the capability of your interception technology and the type of alien ship can provide your general chances of surviving the encounter.

If your interceptor takes damage, it may not be able to fly as well, and you will see the alien ship extend beyond weapon ranges on the combat display. If you think you are close to downing the alien craft, you can still press the attack! Even damaged, if you step up the aggressiveness of the attack, your interceptor will attempt to close again on the alien. For example, if you get hit while in cautious mode, and the alien is creeping away, click standard or aggressive mode. If the interceptor is intact, it may be able to valiantly achieve weapon ranges again. Why your damaged ship cannot hold position at a cautious attack distance but can still close to standard attack is unknown. Nevertheless, you can exploit it to your advantage in some circumstances.

None If by Land, Two If by Sea

Although they fly, X-COM craft are designed with targeting systems geared to work underwater only. This means the interceptor can track an alien craft in the air and follow it, but cannot engage it until it has submerged.

You are told if your ship has made an airborne interception and cannot attack. When you see this message, select the **CONTINUE INTERCEPTION PURSUIT** option until the alien submerges. At this time, the interceptor's weapons can be activated.

Debriefing

When you return from an engagement, there may be a number of complications forced upon you. The results of the conflict may change the alien behavior somewhat, and closer to home your interceptors will need to refuel and possibly undergo damage repair.

Effect of Engagements on Alien Strategy

The game does not really give you any hard evidence that your interceptions are affecting the alien effort. You never know for certain if attacking the Supply ships is harmful to a colony's survival, or if you truly saved a funding country by stopping that infiltration mission. However, some recurring trends have been noticed in the game.

If you successfully intercept alien ships consistently, the aliens may move their activity elsewhere. This is good for the country your bases are close to, because it reduces alien traffic in the territory's air and sea space.

The opposite can happen as well, with aliens sending craft to hunt for your base. As you approach the point in the game where you are beginning to even the odds with the aliens due to research, you might decide to ignore small USOs. Keep in mind that even small USOs count as alien activity in a country. One way to deal with this is to shoot down the smaller ships but decline the recovery. By the time you have weapons capable of letting you selectively attack larger ships, the small ones should be easy to attack.

Craft Fuel

Undocumented in the X-COM manual is the importance of craft fuel. Quite a bit of time is spent looking at the issues surrounding fuel so that you don't have to learn about it the hard way.

There are two types of fuel: conventional and Zrbite. The Barracuda and Triton use conventional fuel, which is very similar to the gasoline used in modern military and commercial vehicles. All advanced craft use Zrbite, an alien substance your X-COM scientists will discover if they research captured quantities from a recovery or assault mission. Conventional fuel is measured in distance, such as miles per gallon. Zrbite is measured by time, with roughly six Zrbite cells providing each hour of travel. Conventional fuel seems to be free to the X-COM team, and requires only time to refuel a craft. Zrbite is a raw material whose supply is limited to the amount your assault teams gather.

This means, of course, that there are fundamental differences in the way craft operate, based on their fuel use. Conventional craft have a range that is limited by the amount of fuel required to return to base. If you launch a Triton or Barracuda and fly as far as possible, the game forces your ship to turn back toward its base when fifty percent of its fuel has been used up. If, however, you order the ship to patrol a short distance away from its base, it is not forced to return until only enough fuel remains in the tanks to return home. So, a close patrol craft could conceivably use ninety percent of its conventional fuel before needing to turn home. This gives it a high potential loiter time.

Zrbite burning engines, however, operate based on time limitations. A Manta has a total fuel capacity of thirty Zrbite cells. This is approximately five hours of operational deployment time, which is rather short compared to the Triton. Regardless of destination or speed, however, all Zrbite burning craft are forced to begin their return to base when the

tanks reach fifty percent capacity. This translates to an outbound journey limitation of two and a half hours for the Manta, five hours for the Hammerhead, and a seemingly paltry four hours for the vaunted Leviathan.

In actuality, these limitations are not as pronounced as they appear. Because of their superior speed, advanced craft can actually cover nearly equal or greater distances as the conventional fuel burning craft, and in less time.

What does all this mean? It reinforces the value of having well placed X-COM bases. A base close to areas of high alien activity can put its conventional craft in the air for long periods of time in searching for bases (see Patrol, later in the chapter). Even at patrol speeds, which consume less fuel than travel speeds, the Zrbite craft are restricted to the aforementioned times.

It also means that advanced craft can and should be used for long-range missions at the edge of the detection envelope. A Manta can speed across a continent for an interception very quickly; however, the Barracuda will run out of fuel long before it reaches the same target. Now examine the case if an interception takes place in close proximity and the USO decides to land while the interceptor is chasing it (see also "Assaults," later in the chapter). The Barracuda might be able to remain on station over the alien until it takes off or the assault team arrives. The Manta would need to return if the alien mission took more than two hours, which it very well could.

Often, you will be wrapped up in the heat of the battle and may simply launch the closest fighter for an engagement. Most of the time, this should work just fine. This discussion is to make you aware of the fuel limitations and help you choose the right craft for each mission.

Remember that advanced craft eat up Zrbite each time they return from a deployment. Understanding the fuel limitations of each craft can help fine-tune strategies and avoid needless wastes of Zrbite and time. Table 4.8 organizes this data.

Table 4.8. Craft Refueling Data.

Craft	Refueling Time	Refuel	Range Cost
Barracuda	up to 7.5 hours	n/a	Distance
Triton	up to 14.5 hours	n/a	Distance
Manta	up to 3 hours	6 Zrbite	2.5 hours
Hammerhead	up to 4 hours	6-8 Zrbite	5 hours
Leviathan	up to 4 hours	6-8 Zrbite	4 hours

Refueling Time—Assumes craft was operated until maximum range was reached.

Refuel Cost—Assumes craft fuel was exhausted as much as possible during operation.

Range—For conventional fuel burning craft, range is limited by distance from home base. For Zrbite fueled craft, it is based on a time limit and the amount of Zrbite the sub carries. See text for further explanation.

Repair Times

After an engagement where ship-to-ship combat has taken place, your interceptor may be damaged. This is also an undocumented item in the manual, but repair times to your ships are based on the amount of damage they take and the technician's ability to restore the craft hull to full strength.

It appears that repair crews can restore about twenty-two and a half points per day or about one per hour. Unfortunately, there is very little in X-COM that tells you how much damage the craft has suffered. To find a clue, you must eyeball the damage indicator on the Engagement screen and estimate the time your ship will be down. In some cases, if the ship has a high armor capacity, the hulls will rank very high in points. The Leviathan has 1250, for example, and this is why repairing 25% of the Leviathan is a greater time consuming task than repairing 25% of the Manta. For example, in mathematical terms:

.25 damage * 400 hull points = 100 points of damage to Manta.

To determine the down time, divide 100 points by 22.5, which is about 4.4 days.

Table 4.9. Approximate Damage Repair Time in Days.

Craft	Damage % 1-25	26-50	51-75	76-99
Barracuda	up to 1.3	up to 2.7	up to 4	up to 5
Manta	up to 4.5	up to 9	up to 13	up to 16.5
Hammerhead	up to 10	up to 20	up to 30	up to 38
Leviathan	up to 14	up to 28	up to 42	up to 55

Because X-COM: TFTD does not provide repair statistics, these figures are observations and estimates.

Advanced craft are repaired at a rate of approximately 22.5 hull units per day.

There does not appear to be any monetary or resource costs associated with repair.

Interceptor Strategies and Advanced Development

X-COM players generally share varied opinions on the research and development of advanced craft. It is possible for example, to merely research the new ships and build just the Leviathan for the final mission. Many X-COM veterans did this with the original game, and used only the leased interceptors and transport until the end, when an Avenger was required. Certainly, one can do the same with TFTD. The key to surviving, however, is developing the weapons systems. A Barracuda equipped with a strong configuration (see Table 4.7) can handle all but the Dreadnought.

What then are the advantages of building your own ships? Primarily, it is a matter of personal preference and strategic convenience. For some gamers, climbing the research tree and manufacturing the new devices discovered during the game is half the fun. From a strategy standpoint, the new interceptors can make life much easier for the player, if the gamer is willing to maintain them.

If your strategy has included a large number of USO recovery and assault missions, then you probably have a large supply of Zrbite from the USOs and cash from selling the booty. In this case, you can choose to build the advanced ships at your whim and fancy. You are more than well prepared to build and maintain them.

If, however, your strategy is to finish the game as fast as possible, then you may forego building the craft because it requires time and resources. In this case, it is more important for you to knock out the synomium sites, which do not require the use of Mantas or Hammerheads. Your goal in this instance is to develop your troops as quickly as possible. Save your scientists and technicians for other items like personal armor and molecular control research. Start building the Leviathan about a month or two prior to the time you want to embark on the final mission.

If your cash flow is particularly low, it may be advantageous to build at least the Manta for basic interceptions. The flying subs that you build are relatively fixed cost assets in terms of dollars, while the leased craft generate cash expenses every month. The built subs use up Zrbite, but if you can accomplish a few recoveries each month, you should be able to sustain the consumption.

Additionally, interception with the Manta is very efficient. The Manta is so fast it can quickly catch up to most USOs. Barracudas sometimes will take so long to pursue that the alien will be out of your detection device range before the engagement can begin. Dreadnoughts are the only alien craft capable of outpacing the Manta.

If your cash flow is weak, chances are you lost some funding countries. Again the Manta is useful in this situation because of its quick launches and strikes, its quick to return and refuel, and it can accumulate many interceptions in a month. This adds points in your favor, even if you do not recover the downed USOs. Of course, there is a danger in a zealous crusade on alien traffic. Aliens will increase their efforts to find your bases if you pester them enough.

If you have enough fuel left after an interception, you can assign an interceptor to a new target after it shoots down an alien. Simply click on the ship in the Geoscape, and select the **NEW TARGET** option from the available choices. Be sure to check the fuel state and reference it with the range category in Table 4.8. If you have enough fuel, you can knock out two or more alien ships with one stone.

This is not true of the ground assault missions. After a ground assault, even if the X-COM craft has greater than 50% of its fuel remaining, the sub *always* heads home.

Which leads to another benefit of the advanced craft: You can determine when aliens are trying to attack your base if you are using transmission resolvers. If a craft has a mission type of "floating base attack," then the USO is trying to seek and destroy one of your bases. The alien will not always find an X-COM base. If a Battleship or Dreadnought is getting close, however, only the advanced craft have a chance of stopping them before you are rudely dumped into the squad combat mode.

The same is true of other critical missions such as the terror mission or intercepting an alien infiltration mission. Terror and infiltration missions will either generate a high negative score against you, lead to the loss of a funding nation, or both. Hunters are commonly the alien ships used for these missions, and by looking at the alien ship tables, you can see they have a maximum speed higher than each craft, excluding the Manta and Leviathan. If you want to stop one of these ships and seconds make a difference in reaching it, the Barracuda may fall short.

Old Dogs, New Tricks

If you decide to stick with leased subs as the primary workhorses of your X-COM team, then new weapon development is the key to success. The Barracuda frame may be slow, but it is functional and serves faithfully within its limits. The best way to expand those limits is to retrofit newer technology on the interceptors. From the interception success table, you can see that the Barracudas are all you need for most interceptions, if you mount the proper hardware.

The Sonic Oscillator is the best weapon in the X-COM inventory. It does less damage than hits from a PWT, but carries up to 100 rounds and over an extended dogfight does more damage. On single hard point ships like the Hammerhead, it is the only weapon worth carrying. Pairing one with the PWT is a good combination on ships with two hard points, but many X-COM players elect to carry two Sonic Oscillators instead.

If you build a new base that appears to be getting a lot of action, you can transfer a better sub to the base from a less active area. This is faster than building a new sub. Transferred craft, unlike transferred aquanauts, keep their weapons with them and are already configured by the time they arrive at the new base. Just ensure that the new base has a supply of interceptor ammunition and fuel, if necessary.

The game does not allow you to build new ships unless it is at a base with an empty sub pen. When planning your bases, build at least one pen at the base that will have the best technician complement. It might seem expensive and unnecessary at first, but even if you decide to keep renting Barracudas for new bases, it will be one less obstacle in your way when you are ready for another interceptor.

If you decide to build advanced craft, then the pen will be ready as well. Remember that the sub pen, like all base facilities, is of a fixed cost and build time. Unlike ships and equipment, its construction cannot be increased with more technicians. If you build them early, you'll be able to put new subs into action sooner.

Other Types of Interceptions

Ship-to-ship combat conflicts are the bulk of interception duties, but there are other styles of interception you can use.

Patrol

Normally, patrol mode is what any interceptor goes into when it reaches a way point you have set for it. Way points are set when you order a launch but do not target an alien craft. Patrols are useful for seeking out alien colonies or waiting on station if you expect alien activity to surface momentarily.

If the USO seems headed to a particular destination, the interceptor can then follow it and predict where an alien base may be located. There are occasions where you may be following an alien ship when it suddenly seems to disappear. Either the USO has moved

beyond your detection range or it has entered an alien colony. If the interceptor was already following the USO from a distance, and the alien disappeared within the detection range of your bases' sonar or transmission resolver units, return it to the last known location and patrol. If there is a colony site, it will probably show up after a few hours of patrolling.

If the USO disappeared outside the range of your detectors, however, you will not know if the USO destination was a colony, a shipping site, or infiltration site. If you have the transmission resolvers, pay close attention to the mission the USO is performing. If it is a fleet supply ship, chances are its destination is a colony. You can tell the interceptor to go to the last known location and patrol, or you can try to extrapolate the destination or course and set a way point for it. Aliens tend to fly in generally straight lines unless they are on a floating base attack, so predicting their path is a good way to catch up to one that has momentarily dropped from your detection range.

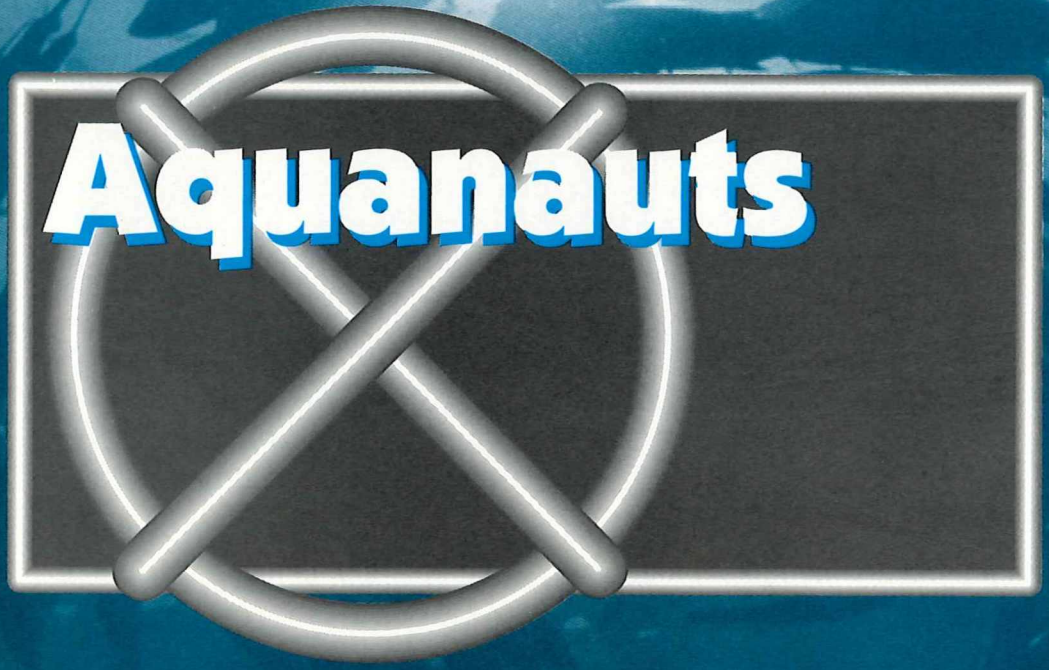
A final word on patrolling: be conscious of your interceptor's fuel state. As described in the Fuel Crisis section of Interceptors, different craft have different ranges. What a disappointment it would be to send a craft on a base hunting mission, only to run out of fuel before reaching the way point! For patrols close to one of your bases, the Barracuda and Triton have good loiter times. For a way point across the globe, however, advanced interceptors may be the only choice.

Assaults

If an interceptor is following a USO and it lands during the pursuit, you have a few options depending on the interceptor craft used. If you use the Triton, it must be launched to the landing site. If you are using the Hammerhead or Leviathan as both fighter and transporter, you can land and begin an assault immediately.

Some X-COM players actually use the Triton as an intercept vehicle. Although it cannot shoot at the USO, it can follow it and strike if it lands. Another tactic is launching a Triton transport and a fighter at the same time. The fighter will intercept the USO first because it is faster, and the Triton will have a head start on the journey to the assault site. Still others like to send in a fighter even if the USO has landed. This way, if the alien decides to leave, the fighter can pounce on it before it gets too far. The transport gets to assault the alien ship either way, except if the fighter must fire upon the USO (the resulting damage reduces the value of the salvage).

5



In this chapter, you'll take a look at the men and women (commonly referred to as aquanauts) used to wage war against the alien menace. Just like any other force of armed soldiers, the aquanauts are recruited, trained, and then tested in the heat of battle. In order to succeed in ridding the Earth of the alien menace, you must master the tactical combat portions of the game. Vital to this endeavor is a good working knowledge of the aquanauts, who you'll use to engage and eliminate the aliens wherever they appear.

Recruiting Aquanauts

Excluding the initial eight aquanauts present at your base when you begin the game, aquanauts must first be recruited into your ranks. To begin the recruitment process, select **BASES** from the button bar on the geoscape. From the Bases screen, select the **PURCHASE/RECRUIT** button. The Purchase/Hire Personnel screen appears and presents you with your current purchase options (see Figure 5.1).

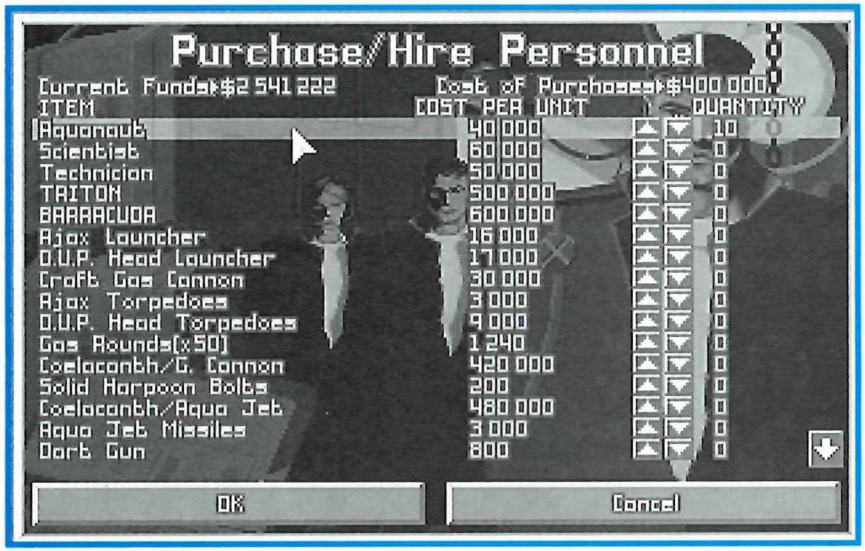


Figure 5.1. Recruiting aquanauts using the Purchase/Hire Personnel screen.

Each aquanaut costs an initial fee of $40,000 to recruit, plus an additional salary of $20,000 per month. To recruit an aquanaut, simply use the Up and Down arrows to select the number of aquanauts you want, and then select **OK** at the bottom of the screen to complete the transaction. Your request for additional aquanauts is sent to a nameless location in the X-COM bureaucracy, a request which should be fulfilled within the next few days. More specifically, most recruits take three days (72 hours) to arrive at your base. When your fresh recruits arrive, the Items Arriving screen appears (see Figure 5.2).

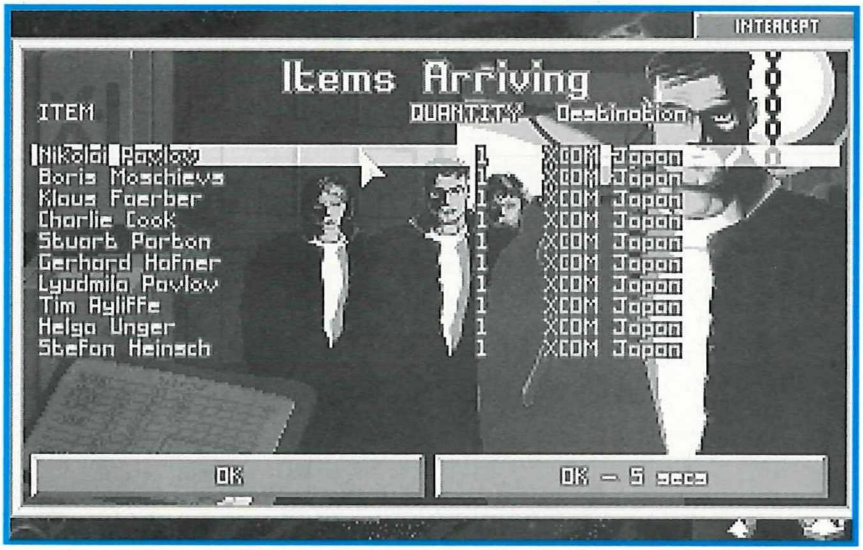


Figure 5.2. Aquanaut recruits arriving at an X-COM base.

Viewing Aquanauts

After your new troopers have arrived, you should take a look at their ability scores. To do so, select the **AQUANAUTS** button from the Bases screen button bar, and the Aquanaut List screen appears (see Figure 5.3). This screen lists all of the aquanauts that are present at this base, including aquanauts stationed on board any transports docked at the base and those occupying base living quarters. This list contains three pieces of information: an aquanaut's name, his rank, and the transport craft—if any—to which he is currently assigned.

Figure 5.3. The Aquanaut List screen.

To look at the statistics of an individual soldier, click on his name in the Aquanaut List. The Aquanaut Data screen appears (see Figure 5.4).

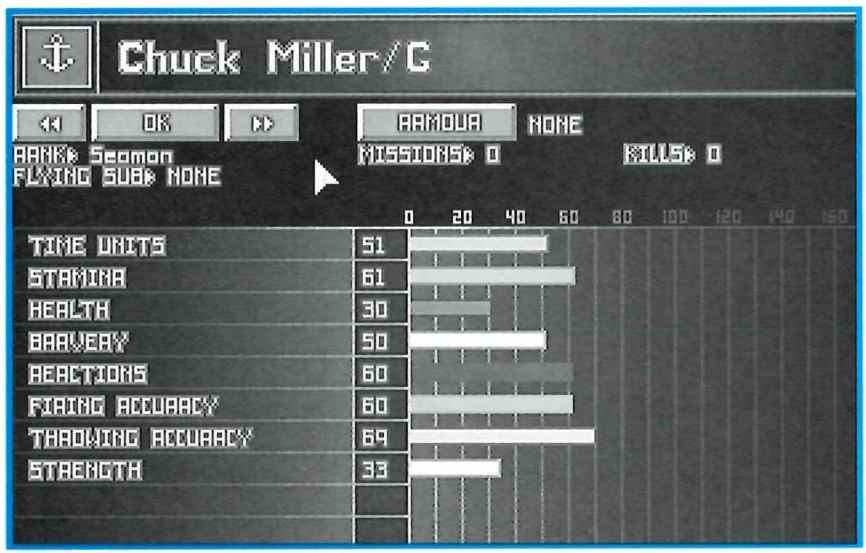


Figure 5.4. The Aquanaut Data screen.

The Aquanaut Data screen provides a detailed look at all the ability scores of the selected soldier, plus a number of other items of information, such as the number of missions the aquanaut has flown, the number of aliens he has killed, his rank, and what type of armor (if any) he is currently wearing. The left and right control arrows allow you to scroll backwards and forwards through the Aquanaut List, while selecting **OK** returns you to the Aquanaut List screen. The aquanaut's ability scores are represented by horizontal bar graphs that stretch from left to right, with higher ability scores being better for all categories.

Ability Scores

Every aquanaut is randomly given a numerical score in a wide variety of categories, ranging from time units (TUs) to molecular control skill. The following is a brief description of each of these attributes.

Time Units

Time Units, or TUs for short, can be considered a sort of "activity resource pool" that an aquanaut draws from to perform certain actions on the battlefield. Every action that a soldier takes during his turn, from changing directions to firing at an alien, requires a certain amount of TUs. The higher the number of TUs the better; a soldier with a large amount of TUs will be able to move farther, fire more often, and perform more miscellaneous actions (such as using a medi-kit) than a soldier with a low TU rating.

Stamina

This ability score indicates an aquanaut's endurance. An aquanaut with a high stamina rating can perform more activities per turn without becoming tired.

The word "Stamina" is often used interchangeably with "Energy" in a variety of soldier data screens. For all intents and purposes the two terms are completely interchangeable.

Health

This is a numerical rating of a soldier's current state of health, roughly analogous to "hit points." All soldiers start the combat with their full measure of health points. If they are wounded during combat, this health number decreases; if this number reaches zero, the soldier becomes unconscious or dies.

Bravery

Simply put, the bravery ability assigns a numerical value to the courage of an individual soldier. Even Navy SEALS get scared sometimes and the same goes for X-COM troopers. The higher a soldier's bravery rating, the more likely he is to stand his ground under the worst circumstances. Cowardly soldiers are much more likely to freeze in panic situations, run away in terror, or go berserk (randomly shooting at anything in range).

Reactions

This ability score could be more accurately described as "reaction speed." A high rating in this ability means that a soldier can quickly respond and fire upon any aliens that he sees during the alien movement phase.

As you can imagine, getting off the first shot can mean the difference between life and death. Someone once said that combatants are often divided into two categories: the quick and the dead. Having a high reactions rating for your soldiers increases the odds that they'll fall into the former category.

Firing Accuracy

The higher a soldier's firing accuracy, the better chance he has at hitting his target when firing a ranged weapon. Firing accuracy is undoubtedly one of the most important soldier stats in the game.

Soldiers with low firing accuracy skills have an annoying tendency to miss targets, fumble their shots, and in some cases accidentally shoot their own comrades. For this reason, every soldier in your squad should have a good firing accuracy.

Throwing Accuracy

This ability score indicates how accurate the soldier can throw objects. Soldiers with high throwing accuracy make excellent grenadiers—they tend to hit what they're aiming at. Conversely, you should think twice about giving a soldier with low throwing accuracy (below 50%) any grenades at all. Nothing is more frustrating (or disastrous!) as having a

fumble-fingered soldier chuck a grenade towards an alien, only to see his lousy throwing accuracy cause the primed grenade to bounce off the head of a nearby soldier and explode in the midst of your own troops!

Strength

This is a rating for raw physical strength; it also indicates how far an object can be thrown. A high strength rating allows a soldier to carry greater amounts of weaponry, equipment, and armor before becoming fatigued. Having a high strength rating is vitally important for heavy-weapon specialists and grenadiers.

Molecular Control (MC) Strength

This ability only appears after an aquanaut has received at least one month of training in a molecular control lab. MC strength can be best described as a soldier's natural ability to withstand molecular control attacks from aliens.

A high MC strength indicates that a soldier will be hard for aliens to panic or control. A low MC strength makes a soldier susceptible to molecular control by the aliens. Unlike most other ability scores, MC strength *never* increases. For more information, see Chapter 10, "Molecular Control."

Molecular Control (MC) Skill

The corollary to MC strength, MC skill is a numerical value that indicates a soldier's skill with an MC disrupter device. Each soldier begins with an MC skill of zero; MC skill can only be increased by monthly training in an MC lab or by using an MC disrupter effectively on aliens during combat. For more information, see Chapter 10, "Molecular Control."

Creating an Elite Force

When creating an effective fighting force of aquanauts, it's a good idea to remember the following maxim: "Keep the best, sack the rest." Remember that an X-COM soldier is supposed to be an elite trooper, the "best of the best." If you attempt to recruit and train slow, cowardly, nearsighted, and imperceptive soldiers, you'll wind up losing a lot of missions. Think of your X-COM troopers as the 21st-century equivalent of U.S. Navy SEALS, Russian Spetnatz, or British SAS. Tackling aliens in the briny depths of the world's oceans demands intelligent, brave, well conditioned men and women.

The best way to make your soldiers an elite force is to recruit and train only the best candidates. Unfortunately, you can't radio ahead to your local X-COM recruiter and inform him to send you only the most qualified recruits. When your new recruits arrive at your base, you should spend some time looking over their ability scores, weeding out the weak, the slow, and the cowardly. To determine which soldiers are most acceptable, it helps to adopt certain ability score standards for your troopers.

Ability Score Minimums

Looking at the Aquanaut Data screen, you can quickly gauge the abilities of the soldier selected (see Figure 5.4). Because you want to recruit only the best soldiers, implementing a set of minimum acceptable ability scores can be extremely helpful in putting together an effective fighting force. You can choose whatever standards you wish, but the following are good minimum ability scores to consider also:

Table 5.1. Suggested Minimum Aquanaut Ability Scores.

Skill	Score
Bravery	40+
Firing Accuracy	50+
Health	30+
Reactions	40+
Molecular Strength	50+

Unless you've managed to research and build a molecular control lab *and* enroll all your troopers into the monthly molecular control training program, you won't be able to view a soldier's MC strength rating. Until you've managed to do so, the only way to root out soldiers with weak MC ratings is to view their performance during combat. If a soldier is constantly panicking, going berserk, or being molecularly controlled by aliens, chances are that soldier has a low MC strength. Sack those soldiers as soon as you return from the battlefield.

You can use one of the many shareware soldier editing utilities (described in Chapter 12, "Game Resources") to view a soldier's MC ability scores even before you've enrolled him in an MC training program. After viewing the MC stats of your soldiers, write down the names of all your troopers with low MC strength, and then sack them as soon as you reload your saved game in TFTD. If you're squeamish about tinkering with your saved game files, don't worry because you're simply viewing a trooper's statistics—not changing or saving them. Your soldier data files will be untouched.

Although there are several other important ability scores that a soldier is given, the five that were mentioned earlier—bravery, firing accuracy, health, reactions, and MC strength—have the greatest impact on the combat performance of your soldiers. If a soldier's ability score in another area is very low, you should use your own judgment to decide if he is fit for duty.

If a soldier is high in several areas, but low in a key ability score (such as bravery), you may want to keep him on if you're running short of soldiers or if you need soldiers to garrison your bases. (See "Assault Squads and Base Defenders".) You'll usually discover that your soldiers offer a widely differing array of strengths and weaknesses. Some soldiers may be stronger and faster than some, while others may have more health and higher bravery. Instead of lumping all of your aquanauts together as common soldiers, you should take advantage of each of their strengths and weaknesses. In other words, assign each trooper a *specialty*.

Soldier Specialization

Just as in real life, some of your aquanauts are more aptly suited for some tasks than others. Basketball superstar Michael Jordan is a prime example of this specialization. Although Jordan may have been an admittedly mediocre baseball player, his ability as a basketball player is unequaled.

That said, assigning each of your soldiers to a task in which he can excel is a wise use of your resources. Giving grenades to a soldier with weak throwing accuracy and strength ratings can be disastrous. Likewise, equipping a soldier with a low firing accuracy with your most powerful heavy weapon reduces the effectiveness of your squad. To get the most out of each soldier, carefully examine each soldier's ability scores and decide the specific role for which he is best suited.

Specialties

It can be extremely helpful to place your soldiers into the following categories during combat. However, these specialties are only suggestions—feel free to create any types of specialists you want. You can even ignore specialists entirely and employ a jack-of-all-trades philosophy for your troopers. The following are some specialty categories you can use when assembling your own squad of soldiers.

After each Aquanaut specialty, a one- or two-letter abbreviation for that specialty type is listed. Attach this abbreviation to the end of a soldier's name so that you can quickly determine—at a glance—what his area of expertise is. For example, a heavy weapons specialist named "Rutger Heinrich" would become "Rutger Heinrich/HW."

In addition to using the soldier name text field to record soldier specialties, you can use it for a variety of other purposes. If you want a soldier sacked, just add the word "/SACK" to the end of his name. When you're finally ready to rid yourself of unwanted soldiers, you can quickly remove the soldiers that you've marked for demotion without having to remember any names or worry about sacking the wrong person. You can also use an asterisk (*) after an aquanaut's name to indicate if that soldier is currently enrolled in an MC training program.

Point Man/Scout (P)

Prerequisites

Normal ability score minimums, plus:

Reactions: 50+

Firing Accuracy: 60+

Time units: 55+

The point man is the person who leads the squad into battle. A high reaction speed is vitally important for these troopers who must be able to spot, fire upon, and eliminate the enemy before any retaliation occurs. A large number of time units and a high firing accuracy are also important, because they ensure that the scout can hit and continue to hit the object at which he is aiming. You should arm this soldier with a Gauss Rifle, Sonic-Blasta Rifle or Sonic Pistol, plus a small number of grenades.

Heavy Weapons (HW)

Prerequisites
Normal ability score minimums, plus:
Strength: 35 +
Stamina: 60+
Firing Accuracy: 60+

It's easy to spot these brutes—they're the ones with bulging biceps, size 15 combat boots, and a cold cigar stub clamped between clenched teeth. Their job is to lug around the big guns of the X-COM arsenal—disrupter pulse launchers, hydro jet cannons, and other massive engines of destruction.

Strength and stamina are the hallmarks of these troopers, because heavy weaponry tends to be exactly that—heavy. Most heavy weapons fire projectiles that have wide explosive radii, so pinpoint firing accuracy (to ensure that the aliens are hit but none of your troopers are) is important. Bigger weapons tend to have limited amounts of ammo, so you'll also want to give these troopers Thermic Lances or Sonic Pistols so they can defend themselves when their primary weapons run out of ammo. If they can handle the extra weight, you should also add a few extra grenades.

Grenadier/Medic (G)

Prerequisites
Normal ability score minimums, plus:
Strength: 35+
Throwing accuracy: 70+

You should think of these troopers as your support personnel. Their good throwing accuracy makes them perfect for throwing grenades and magna-pack explosives, while their high strength gives them longer throwing range than most troopers. Their high TU rating allows them to reach wounded soldiers in a hurry, but also leaves enough points to administer first aid.

Perhaps equally as important, Grenadiers serve as walking stockpiles of ammunition and extra supplies. The same skills that make them good at lobbing grenades with pinpoint accuracy make them good candidates for supplying your troops. If a soldier runs out of ammunition, simply have the Grenadier grab a spare ammo cartridge and physically throw it towards the waiting trooper. Finally, these soldiers have enough strength to physically pick up and carry unconscious aquanauts off the battlefield.

Molecular Controller (MC)

Prerequisites
Normal ability score minimums, plus:
Time units: 50+
Molecular control strength: 90+
Molecular control skill: 25+

Unlike the other specialties listed here, the molecular controller won't be available at the start of the game. To create an MC expert, you must first research and build a molecular control lab and a molecular disrupter. Because a soldier's MC strength is hidden until you can test him in the molecular control lab, these experts will normally be drawn from the ranks of your other specialists. For example, after extensive testing in a molecular control lab, it may be revealed that your hulking heavy weapons expert may have an extraordinarily high MC strength. When this has been determined, you should change his specialty to that of a molecular controller. For more information on molecular control, see Chapter 10, "Molecular Control."

Trooper (T)

Prerequisites
Normal ability score minimums

These troopers are your rank-and-file soldiers. Although their ability scores may be exceptional, they may not stand out in any particular area. Because they're not as strong as heavy weapons personnel, you should equip these troopers with Jet Harpoon Rifles, Gauss Rifles, or Sonic-Blasta Rifles. A supply of 2-3 grenades is sufficient, depending on their strength and stamina.

Instead of accepting the names that the computer assigns to your soldiers, you can rename each of them individually. Why? After you have created custom names for each of your aquanauts, you may find yourself being a bit more careful when deploying them in the field. It may sound a bit silly, but giving each soldier a descriptive name—or naming soldiers after friends and family members—may make you pay more attention to what is going on. How could you let a soldier named after your best friend carelessly throw his life away?

Cannon Fodder (CF)

Prerequisites
None.

The slow, the weak, and the cowardly fill the ranks of this specialty. Some players don't sack weak soldier candidates; instead, they use these sub-standard troopers as cannon fodder to soak up enemy fire and flush out hidden aliens. Using them in this fashion, some players place a primed grenade in each hand and send these poor souls straight at the nearest concentration of enemy soldiers, hoping to kill as many aliens as possible in the resultant blast.

Before you use too many hapless rookies as nothing more than clay pigeons for alien target practice, there are a few things to consider. First, aliens score points for killing X-COM soldiers—giving them too many easy kills will cause your point totals to quickly drop into the red. Secondly, aquanauts killed in the line of duty will tend to reduce the morale of any other soldiers on the battlefield, making them more prone to panic or go berserk. Finally, after you add up the cost of recruitment, monthly salary, equipment and weaponry, even the lowliest seaman represents a substantial investment in time and money. Besides, what self-respecting X-COM commander would purposefully march the soldiers under his command off to certain death?

You'll notice that the ability scores of your soldiers may increase throughout the course of their careers, especially when they engage in large amounts of combat activity. (See "Improving Attributes.") When this happens, new higher ability scores may entitle some soldiers to be assigned to another specialty. To ensure that a soldier is always assigned to the job that fits him best, you should carefully examine each aquanaut's ability scores after every battle. If a trooper performed beyond expectations and his ability scores increased to new levels—making him a prime candidate for another specialty—simply chance his specialty suffix (i.e., "/HW," "/P," etc.) so you can give him the right equipment on the next combat drop.

Assault Squads and Base Defenders

After you've divvied up your soldiers into their respective specialties, divide them into one of two broad categories: assault squads and base defenders.

The assault squads are the troopers that you load onto transports and use to attack the enemy on the battlefield, while base defenders are used to garrison your bases and keep them safe from alien attack. Your assault squad usually consists of your best, most experienced troopers. More specifically, you should look for a high bravery rating (possibly 50 and above) for all of the soldiers in this category. These soldiers are facing the enemy on the battlefield, making it far more likely that they will be faced with molecular control and adverse psychological effects, which makes a high bravery skill essential.

The base defenders are the soldiers you use to garrison your bases while the assault squad is away. High ability scores and lots of experience aren't necessarily essential for these troopers, because they will only face combat when an alien submarine attacks one of your bases. For that reason, the ranks of your base defenders should be filled with lower quality troopers than what you'd find in your assault squads. If one of the soldiers in your assault squad gets killed or wounded, simply "promote" one of your base defenders into the vacant slot.

Ranks and Promotion

Like any modern-day military organization, X-COM relies on a well defined chain of command. Lower-ranking officers are promoted to higher ranks when open slots become available. Unlike most military services, however, the system of promotion used in TFTD isn't entirely based on ability. Although combat experience does play a small part in the promotion of an aquanaut to a higher rank, the biggest contributing factor is the number of soldiers and the number of higher-ranking officers. The more soldiers you have, the greater the chance an individual soldier will be promoted. For example, an aquanaut will only be promoted to Captain when there is close to three dozen aquanauts employed by X-COM.

Ranks

The ranking system used in TFTD is loosely based on the system (and nomenclature) used in the English and American Naval services.

Seaman

Seamen are raw, rookie recruits fresh out of boot camp with *zero* combat experience. The bulk of your soldiers will most likely be of this rank.

Able Seaman

A step up from a Seaman, these are raw recruits that have seen action in combat and have been promoted.

Ensign

The Able Seaman with the most combat experience is promoted to this rank when a position opens up.

Lieutenant

The Ensign with the most combat experience is promoted to this rank when a position opens up.

Commander

The highest-ranking Lieutenant is promoted to this rank when the position is open. This is usually the highest-ranking aquanaut that you should take on a combat mission.

Captain

The Captain is the highest-ranking officer in the game. Because a Captain is valuable in terms of morale, you should very rarely take a Captain on any combat missions. The experienced combat troopers that make up your assault squads don't need the large boost in morale that a Captain provides, but the loss of a Captain in combat could have a devastating effect on even the most courageous soldier.

Effect of Rank on Morale

High-ranking soldiers provide an increase in morale to any soldiers on the same battlefield. This morale boost is a double-edged sword: Although a high-ranking officer may provide a huge boost in morale to your troops, the death of that officer could have a corresponding negative impact on morale. For example, the amount of morale a Commander lends to a squad when alive would be considered "High." Conversely, the negative morale impact of a slain Commander is also considered "High" (see Table 5.2).

Table 5.2. Impact of Rank on Soldier Morale.

Rank	Morale
Seaman/Able Seaman	Low
Ensign/Lieutenant	Average
Commander	High
Captain	Very High

So what does all this mean during combat? In a nutshell, it pays to keep your highest-ranking officers out of harm's way and let your lower-ranking grunts do most of the fighting, which lessens the chance the officers will be killed in combat.

If you have a number of troopers with low bravery scores, the addition of a few higher-ranking officers can bolster their courage. One important point to remember is that a soldier's rank has *no bearing whatsoever* on that soldier's ability to fight. On occasion, a few raw recruits may outfight your Commanders.

Instead of sacking soldiers with borderline bravery scores (between 30 and 40, for example), you can assign them to base defenders and leave them as garrison troops for your bases. To bolster their morale to acceptable levels during combat, station a Captain or Commander at each base. After a base is under attack, move your highest-ranking officer to a safe, secure location farthest away from the aliens.

Because the bravery of the base defense troops is bolstered by the presence of a Captain or Commander, they will exhibit the tenacity and courage that only soldiers with high bravery scores usually possess. Just keep the commanding officer out of harm's way! Nothing is worse than having a squad of cowardly troops see a high-ranking officer get killed—all of the troops will usually panic or go berserk when this happens.

How Many Soldiers Should I Have?

Deciding on the number of soldiers to have at each base is largely a matter of personal preference. As a general rule, you should usually keep at least six soldiers on constant garrison duty at each base. These soldiers never go on combat missions—their sole responsibility is to defend the base when attacked.

For larger bases or for bases more likely to be attacked, keep a garrison of 8–12 soldiers plus a submersible weapons system (SWS). For bases that house your assault squads and transporters, keep 14–20 aquanauts in your assault squad, plus a base defense team of approximately 6–8 soldiers and an SWS.

Keep at least six soldiers assigned to base defense at each base. Even though you may have twenty soldiers assigned to a base, if you send them all on a USO recovery mission your base will be practically defenseless while they're gone. Plan on purchasing a few fresh recruits before any major assault (some soldiers are almost always killed or wounded during a battle), or immediately after you've lost soldiers during a recent base defense action against aliens. Nothing is more frustrating than having a squad of recruits arrive too late to save a defenseless base from alien attack.

Improving Attributes

Just as in real life, your soldiers move faster, shoot straighter, and carry more weight if they engage in a rigorous amount of physical and mental activity. In other words, their ability scores can improve—over time—by frequent use. Ability scores can only be

increased when a soldier is on the battlefield. Soldiers sitting on guard duty at remote X-COM bases will stay the same: no pain, no gain. When your soldiers do engage in combat, some of their ability scores will increase during the battle, prompted by things they've done during combat (see Table 5.2). For example, successfully hitting an alien with a ranged weapon may cause a soldier's firing accuracy to increase. You can check to see if a soldier's ability scores have increased after a battle by looking at the Aquanaut Data screen after a combat (see Figure 5.5).

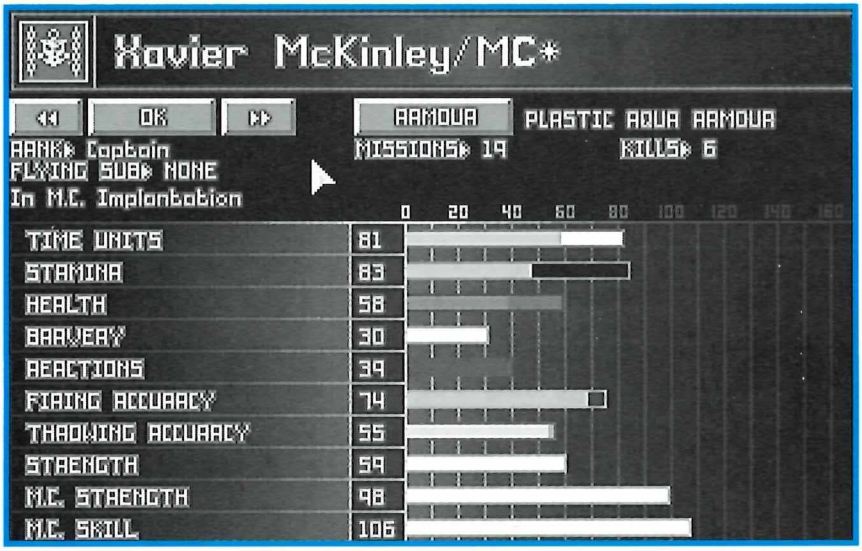


Figure 5.5. The effects of experience on ability scores.

Ability scores that have increased are reflected by an increase of the horizontal bar graph corresponding to that ability score. Any increase over the original score is indicated by a different color on the bar graph. Listed below are each ability score and the actions required to increase them.

Table 5.3. Ability Scores and How They Are Increased.

Ability	How to Increase
Time Units	Expend large amounts of time units during battle.
Stamina	Expend all energy points during battle.
Health	Expend large amounts of energy points during battle.
Bravery	Morale drops but soldier does not panic.
Reactions	Soldier fires at alien during alien movement phase.

Table 5.3. Ability Scores and How They Are Increased.

Ability	How to Increase
Firing Accuracy	Target successfully hit with ranged weapon.
Throwing Accuracy	Target successfully hit with thrown weapon.
Strength	Soldier carries heavy equipment beyond his strength rating.
Molecular Control Strength	*Cannot be increased.*
Molecular Control Skill	If target was successfully molecular controlled.

Although ability scores are normally only increased during combat, you can use one of the many shareware TFTD utilities to modify the stats and abilities of your aquanauts. Using these utilities, you can create a team of superhuman soldiers that never panic, never miss their targets, and are next to impossible to kill! For more information on these utilities, see Chapter 12, "Game Resources."

Transferring Soldiers

At certain points throughout the game, you may need to transfer soldiers from one base to another. Aquanuats are transferred just like any other items between bases. To begin the transfer, select **TRANSFER** from the Bases screen button bar. A Selection Destination Base screen appears. Select the base you want to transfer the soldiers to from the list of bases provided. In the screen that follows, all of your soldiers are listed individually. To transfer a soldier, use the up and down arrows next to his name to indicate that you want to transfer him to the new base. When you're satisfied, click on the **TRANSFER** button.

Only soldiers who *are not* currently assigned to a transport at your base are available for transfer. In order to transfer aquanauts assigned to a transport to another base, you must first use the **EQUIP SUBMARINE** option from the Bases screen to remove the soldier in question from the transport, and then you can resume the soldier transfer process.

Soldiers transferred to other bases generally take an average of 6–15 hours to arrive at their destination, with the primary determining factor being distance. The farther apart the two bases doing the soldier exchange are, the longer the transfer takes.

Sacking Soldiers

For a variety of reasons, you must eventually sack—or fire—some soldiers. Whether you sack soldiers to get rid of weaklings or to trim your budget, the procedure is the same. To sack a soldier, select the **SELL/SACK** button on the button bar located on the Bases Screen (see Figure 5.6).

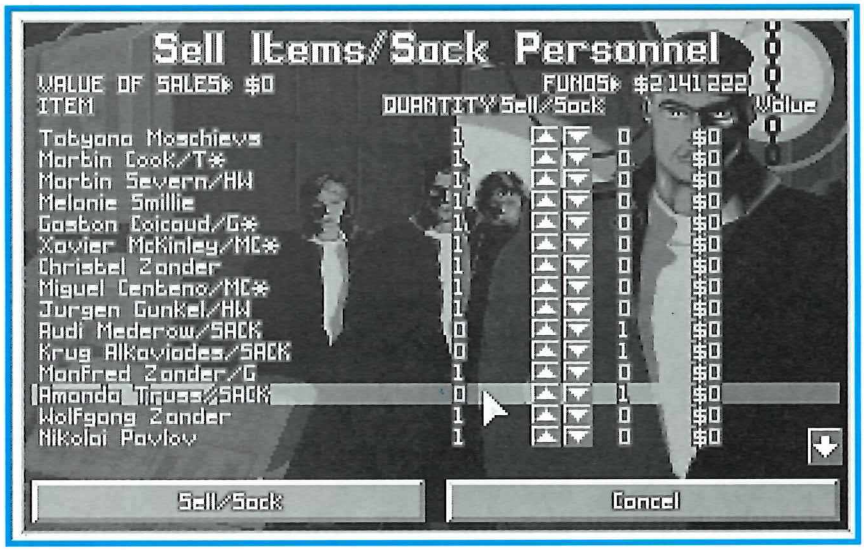


Figure 5.6. Sacking a soldier using the Sell Items/Sack Personnel screen.

To sack the soldiers you want to rid yourself of, simply use the arrows to select the aquanauts and then select the **SELL** button.

If you're planning to sack soldiers, make sure you do so before the end of the month. If you haven't sacked the soldiers by then, their monthly salary of $20,000 per aquanaut is added to your monthly base expenses.

6

Tactical Combat

Through the course of your tenure as an X-COM commander, you're required to wear many hats. In addition to being a skilled manager of personnel, you must direct the research and manufacturing efforts of X-COM. You must also keep the member nations of the X-COM funding committee happy and convince them to keep funding the X-COM project. Most importantly, you are the commanding officer of all X-COM military forces. From intercepting alien submarines to investigating terror sites, combat in X-COM takes many forms.

The most important form of combat is undoubtedly the tactical combat sections, in which you must direct the actions of individual soldiers against the aliens. Tactical combat is vitally important. Regardless of how well you're doing in other aspects of the game, if you can't win on the battlefield with your troopers all will come to naught. For that reason, we must focus special attention on the strategy and tactics essential to win on the battlefield.

What You'll Find In This Chapter

This chapter offers general combat tactics and advice that is applicable to all missions in which you must ship off soldiers. For more detailed tips and tactics on particular aspects of the game, see Table 6.1.

Table 6.1. Tactical Combat Chapter References.

Combat Situation	Reference
Downed USOs	Chapter 7
Landed USOs	Chapter 7
Terror Sites	Chapter 7
Alien Colonies	Chapter 8
X-COM Bases	Chapter 8
Artifact Sites	Chapter 9
T'leth	Chapter 9
Molecular Control	Chapter 10

Before Combat

Knowing the Mission

Before you add one soldier or one piece of equipment to your transport, it's a good idea to sketch out the goals of your forthcoming mission. Your objectives are dictated by a variety of factors, ranging from the type of mission you're undertaking to the composition of the soldiers and equipment you have at your disposal.

Aquanauts

When choosing soldiers for a mission, examine the strengths and abilities of each soldier carefully. A successful mix of soldiers includes both rookies and veterans, with the percentage changing to reflect the difficulty of the mission. For example, tackling small alien USOs is a job custom-made for fresh X-COM recruits, perfect for letting them get much-needed combat experience without getting them killed in the process. Likewise, more difficult combat missions—particularly alien colonies and artifact sites—demand skilled combat veterans.

A good strategy is to use a sliding scale to determine the number of rookies and veterans to take on a combat mission. For easy, small combat missions, 80% of the squad may consist of rookies, with the remainder consisting of battle-hardened veterans. For more difficult missions, the figures are reversed: up to 80% of your troopers should be veterans, while only 20% of your squad classified as rookies. For specific hints and advice on particular combat missions, refer to the appropriate chapter as described in Table 6.1.

Equipment

The weapons and equipment you take with you to the combat site are just as important to your success as the soldiers you choose. If you're investigating a small USO crash site and don't plan to capture any aliens alive, you probably won't need such heavy weapons as Disrupter Pulse Launchers or the use of Thermal Tazers or Thermal Shok Launchers. Conversely, tackling downed alien dreadnoughts and battleships demands the utmost in firepower, so Disrupter Pulse Launchers, SWS platforms and other powerful weapons are a must.

Getting to the Combat Zone

In most cases you must physically transport your soldiers to the combat site using a troop transport sub such as the Triton, Hammerhead, or Leviathan. In some cases, however, you may enter the combat zone using a slightly different method. In X-COM base defense actions you begin combat with your troopers scattered throughout your base along with randomly placed aliens. In the second level of most multi-part missions (ship terror sites, alien colonies and artifact sites, for example) your troopers enter the combat area by way of designated entry squares. For the vast majority of combat missions, however, your aquanauts will normally arrive by way of a transport vessel from which they must then debark.

Loading the Transport

To begin loading a transport, select **EQUIP SUBMARINE** from the Bases screen. From the list of available submarines that appears, select the sub you want to use for the upcoming ground assault (see Figure 6.1).

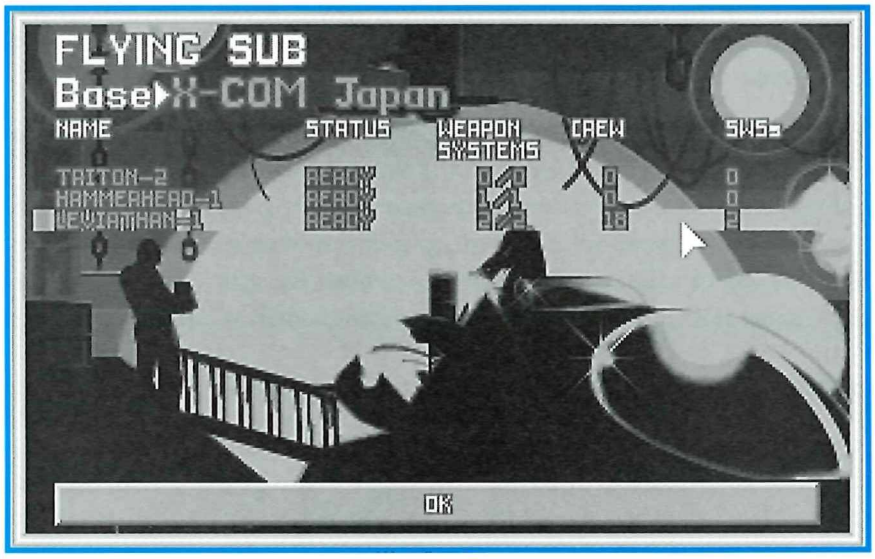


Figure 6.1. The Equip Submarine screen.

Which sub you use to transport your soldiers to the battlefield is largely dictated by the transports you have available and the requirements of the mission. For the vast majority of combat missions, the stalwart Triton is your best choice. See Table 6.2 for a comparison of each of the transport craft.

Table 6.2. X-COM Transport Craft Comparison.

Craft	Aquanaut Capacity	# SWS	Speed	Notes
Triton	14	3	Slow	The old standby. For most missions, the Triton is the obvious choice. The only transport that does not use Zrbite for fuel, making it by far the cheapest of the three transports to operate.
Hammerhead	12	0	Fast	Lacking the ability to carry SWS platforms and having only a 12 soldier capacity, this transport should be used as rapid response to small combat missions. Uses Zrbite for fuel, making it an expensive craft to keep flying.
Leviathan	26	4	Very Fast	The ultimate replication of alien sub technology. It has it all: vast cargo capacity, tremendous speed and powerful weaponry. Unfortunately, it uses Zrbite for fuel, making it expensive to use on a regular basis. Unless you have an abundance of Zrbite, save this transport for the largest of combat sites and the final alien city of T'leth.

To select a sub to load your aquanauts into, click on one of the listed transport subs using your mouse. The Equip Sub screen for your chosen transport appears. In the example shown in Figure 6.2, the Equip Submarine screen for a Leviathan transport is displayed.

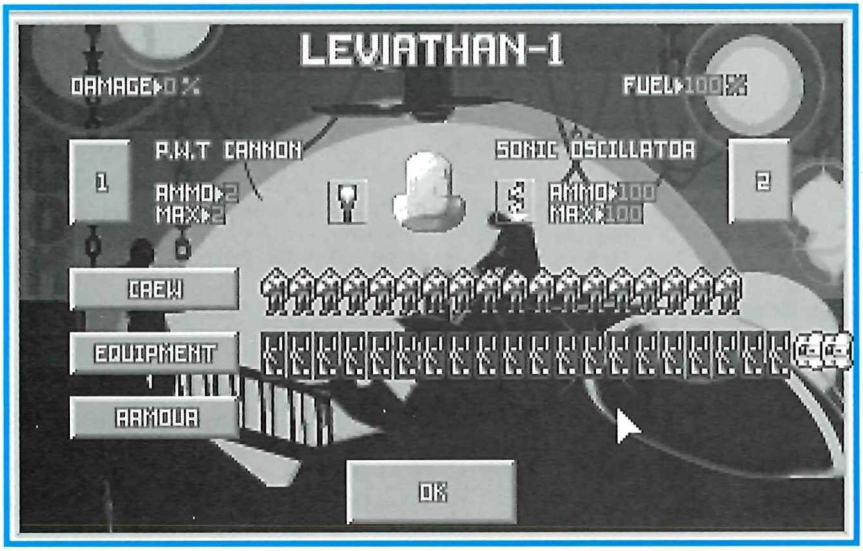


Figure 6.2. Equipping the Leviathan.

There are three buttons on this screen, labeled CREW, EQUIPMENT, and ARMOR. To the right of the CREW and EQUIPMENT buttons are icons representing the number of aquanauts and equipment assigned to the sub, respectively. Selecting the **CREW** button takes you to the Select Squad screen, from which you can add and remove aquanauts from the selected sub (see Figure 6.3).

Figure 6.3. Selecting soldiers to load onto the transport.

To assign (or remove) a soldier from the submarine, simply click on the soldier's name. When you're satisfied with the aquanauts present in the submarine, select **OK** to return to the Equip Sub screen. To load equipment onto the sub, select the **EQUIPMENT** button. On the Equipment screen that appears, you can move supplies to and from the transport and your base store by using the two arrows to the left of each inventory object (see Figure 6.4).

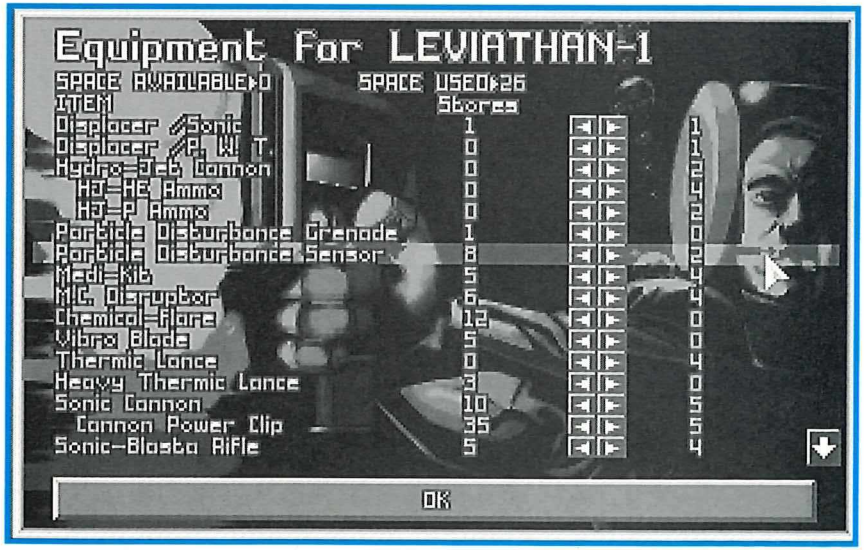


Figure 6.4. Selecting equipment for a Leviathan sub.

When you're satisfied with the equipment loaded onto the sub, select **OK**. Back at the Equip Sub screen, the ARMOR button is used to add and remove personnel armor from individual aquanauts. To do so, select the **ARMOR** button. The Selecting Armor screen appears (see Figure 6.5).

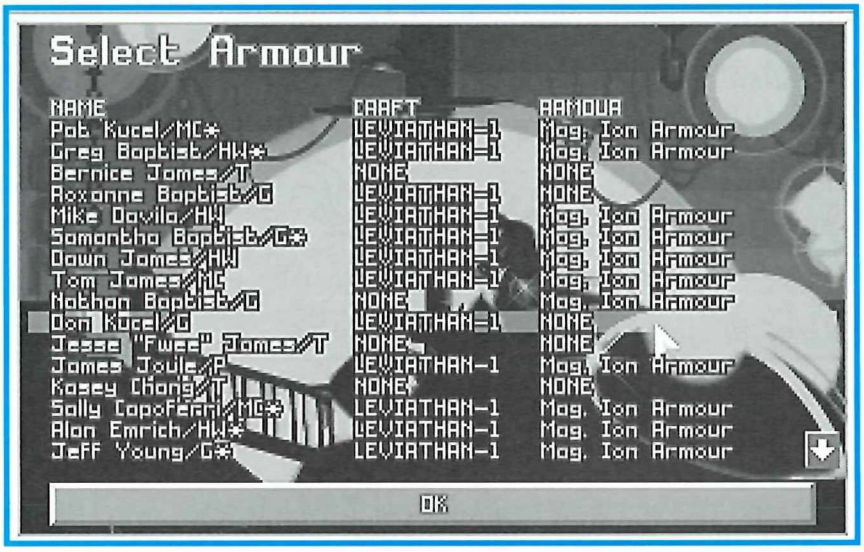


Figure 6.5. Selecting an aquanaut's armor.

To change the armor worn by an individual aquanaut, click on the soldier's name. The Selecting Armor Type screen appears (see Figure 6.6), listing the types of armor currently available at your base. Click on the armor type you want the aquanaut to wear, and you are returned to the Selecting Armor screen. Click **OK** to return to the Equip Sub screen.

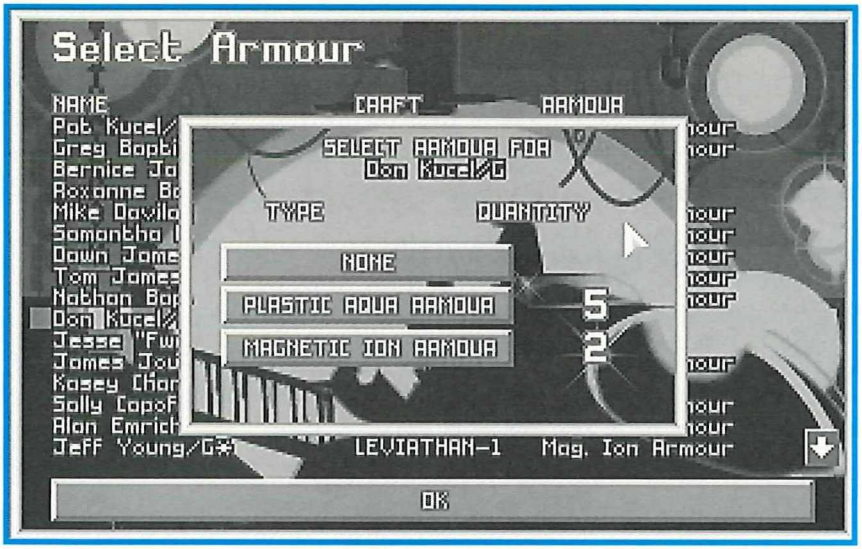


Figure 6.6. Selecting armor type.

The 80-Item Limit

Regardless of the size of the transport craft you're using, you're limited to carrying 80 items of equipment. Although you'll have plenty of space at the beginning of the game, you'll find that as the game progresses—and you begin to carry more soldiers and equipment—space will quickly evaporate. This is especially true in the case of the Leviathan, which can carry up to 26 soldiers at once. It therefore pays to carefully consider every piece of equipment you load onto your transport. Here are some tips on getting the most out of your 80 pieces of equipment.

Limit the Amount of Unnecessary Equipment

If you're going to be in combat during the daytime or in well lit ocean locales, you won't need to carry chemical flares and other sources of illumination. Most of your soldiers should only carry one weapon, an extra ammo clip, one or two grenades, and possibly a medi-kit or other device, depending on their area of specialization. Don't give a soldier two weapons (such as a Gauss Pistol *and* a Gauss Rifle) unless you have a very good reason for doing so. Two different weapons need different weapon clips to reload them, making your aquanauts carry around twice as much equipment. (For example, carry a Gas Cannon and pistol because of the Gas Cannon's limited ammo, but don't carry a Hydro-Jet Cannon and pistol because of the Hydro-Jet Cannon's large ammo capacity.)

Use SWS Platforms

Adding an SWS platform to your transport is a good option if you're running out of equipment space. One SWS platform only takes up one slot of your storage capacity. Unfortunately, an SWS occupies the space of four aquanauts, reducing the amount of soldiers you can take with you.

Restrict Usage of Large Weapons

Weapons such as Disrupter Pulse Launchers, Thermal Shok Cannons, and Torpedo Launchers take up inordinate amounts of space, mainly because each single unit of ammunition for these weapons takes one space out of the 80-item list. For example, carrying along one of all three of the aforementioned weapons—plus five units of ammo for each weapon—adds up to a staggering 18 units of space out of your 80-item list. For comparison, the ammo clip for the Sonic-Blasta Rifle holds 15 shots but only takes up one space.

Use Only the Latest Equipment

More advanced weaponry tends to be more accurate, resulting in less ammo usage. Dart Guns, Harpoon Jet Rifles, and most Gauss weapons have poor firing accuracy and low damage ratings, translating into more ammunition expended to hit and kill the enemy. This problem is compounded by the fact that these weapons—and their ammunition—usually weigh more than their sonic weapon counterparts. Therefore, upgrade to sonic weaponry and Sonic Pulsers as soon as possible and make them your primary weapons. Another advantage to using sonic weapons is that most alien races use them as well. If you run low on ammo during a mission, you can usually pick up extra guns and ammunition from the aliens you've killed.

Go for Versatility

Two of the most useful weapons in the X-COM arsenal are the Hydro-Jet Cannon and the Gas Cannon. Each of these weapons can be fitted with one of three ammo types, making them very versatile. For example, when going on a night mission you may want to take a dozen chemical flares in order to light up the area, but this takes up 12 spaces on the 80-item list. Instead, carry a single Hydro-Jet Cannon with one clip of phosphorous ammunition (12 shots). That combination takes up only 2 spaces, while the phosphorous ammunition provides the same illumination effects as the dozen chemical flares (which occupies six times as much space).

Use Specialists

Instead of equipping every soldier in your squad with a Medi-Kit, give them to only a few members of your squad who can then serve as medics. Likewise, giving each soldier a half-dozen grenades can be counterproductive, especially if most of your soldiers become over-burdened with the extra weight or have low throwing accuracy. Make your soldiers specialists in what they do, and supply them with weaponry suitable to their areas of expertise. Having one skilled M.C. specialist carry one M.C. disrupter is just as effective, if not more so, than three lesser-skilled soldiers carrying the same equipment. (See Chapter 5, "Aquanauts," for more information on soldier specialties.)

Sample Transport Loadout

Because the Triton will be used in the vast majority of combat missions, a sample recommended loadout for that transport type is provided in this section. The loadouts listed are suitable for most common USO crash sites and other general combat areas.

This sample loadout is an example only. It assumes that you've successfully researched all sonic weapons and that you do not need the services of an M.C. specialist. If you haven't yet researched any sonic weapons, simply replace the weapons described below with Gauss or Harpoon Rifle equivalents. Again, feel free to improvise and experiment with your own ship loadouts.

Example #1: 10 Aquanauts and 1 SWS Platform		**Space Used**
1 SWS Platform (usually a Coelacanth/Gauss or a Displacer/Sonic)		1
10 Aquanauts consisting of:		
4 Troopers (T)		
Each carries:	1 Sonic Cannon *or* 1 Sonic-Blasta Rifle w/1 extra clip	8
	3 Grenades *or* Sonic Pulsers	12

2 Heavy Weapons (HW)		
HW#1 carries:	1 Hydro-Jet Cannon (loaded with HE) w/2 extra clips (1P, 1HE)	3
	3 Grenades *or* Sonic Pulsers	3
HW#2 carries:	1 Gas Cannon (loaded with HE) w/2 extra clips (1P, 1HE)	3
	3 Grenades *or* Sonic Pulsers	3
2 Grenadier-Medics (G)		
Each carries:	1 Sonic Pistol w/1 extra clip	4
	6 Grenades and Sonic Pulsers	12
	1 Medi-Kit	2
2 Point-men/Scouts (P)		
Each carries:	1 Sonic-Blasta Rifle w/1 extra clip	4
	3 Grenades *or* Sonic Pulsers	6
	1 Particle Disturbance Sensor	2
	Total space used: 63	

Example #2: 14 Aquanauts		**Space Used**
14 Aquanauts consisting of:		
5 Troopers (T)		
Each carries:	1 Sonic Cannon *or* 1 Sonic-Blasta Rifle w/1 extra clip	10
	2 Grenades *or* Sonic Pulsers	10
3 Heavy Weapons (HW)		
HW#1 carries:	1 Sonic Cannon w/1 extra clip	2
	3 Grenades *or* Sonic Pulsers	3
	1 Thermic Lance	1

HW#2 carries:	1 Gas Cannon (loaded with HE) w/2 extra clips (1P, 1HE)	3
	3 Grenades *or* Sonic Pulsers	3
HW#3 carries:	1 Disrupter Pulse Launcher (loaded) w/5 extra rounds	6
	2 Grenades *or* Sonic Pulsers	2
	1 Thermic Lance	1
3 Grenadier-Medics (G)		
Each carries:	1 Sonic Pistol w/1 extra clip	6
	4 Grenades and Sonic Pulsers	12
	1 Medi-Kit	3
3 Point-men/Scouts (P)		
Each carries:	1 Sonic-Blasta Rifle w/1 extra ammo clip	6
	3 Grenades *or* Sonic Pulsers	9
	1 Particle Disturbance Sensor	3
	Total space used: 80	

Launching the Transport

After all your troops and equipment have been loaded onto the transport, you're ready to send it on its way. To launch the transport, simply select the **INTERCEPT** button from the Geoscape button bar. Select the loaded transport as your intercept craft, and then select your destination, whether it is a crashed USO, an alien terror site, or a raid on an alien colony (see Figure 6.7).

How quickly you must get to your target is largely dependent on the type of the target you plan to intercept. See Table 6.3 for a list of all the tactical combat sites found in TFTD and how long they remain on the battlescape.

Figure 6.7. Selecting a combat site.

Table 6.3. How Long The Targets Stay on the Geoscape.

USO/Site Type	Time	Urgency
Downed USOs	2-5 days	Low
Landed USOs	3-14 hours	Med
All Terror Sites	6-10 hours	High
Alien Colonies	Permanent*	Med
X-COM Bases	Permanent**	High
Artifact Sites	6-10 hours	High
T'leth	Permanent***	Low

All the time periods given are estimates.
Time: The amount of time the combat site remains on the Geoscape screen.
Urgency: The importance of sending your soldiers to the combat site. Ignoring a site with a high importance has serious consequences, ranging from losing large numbers of points to losing the game.
** Alien colonies will permanently remain in the Geoscape until destroyed.*
*** You don't have to launch a transport full of squaddies to land at X-COM base combat sites: the aliens come to you! See Chapter 8, "X-COM Bases and Alien Colonies." Your X-COM bases will naturally remain on the Geoscape permanently unless the aliens destroy the base or you choose to dismantle it.*
**** T'leth, although not visible on the Geoscape map, can be reached by using a Leviathan transport. If you fail to destroy T'leth (or abort the mission), the game ends.*

Hitting the Battlefield

After your transport arrives at the chosen combat area, you are greeted by the Begin Mission query screen (see Figure 6.8). This mission asks if you want to land at the crash site. Selecting **YES** continues with the landing operation, while selecting **NO** causes you to leave the site and return to base. The example shown in Figure 6.8 is taken from a downed USO combat site.

Figure 6.8. Begin Mission screen.

If you do agree to land at the combat site, you are greeted by the Mission Briefing screen (see Figure 6.9). This screen provides you with the basic information necessary to complete the mission. Figure 6.9 is taken from a downed USO combat site. You might say NO to this option if you forgot to load your weapons, or if a situation of higher priority occurs en route.

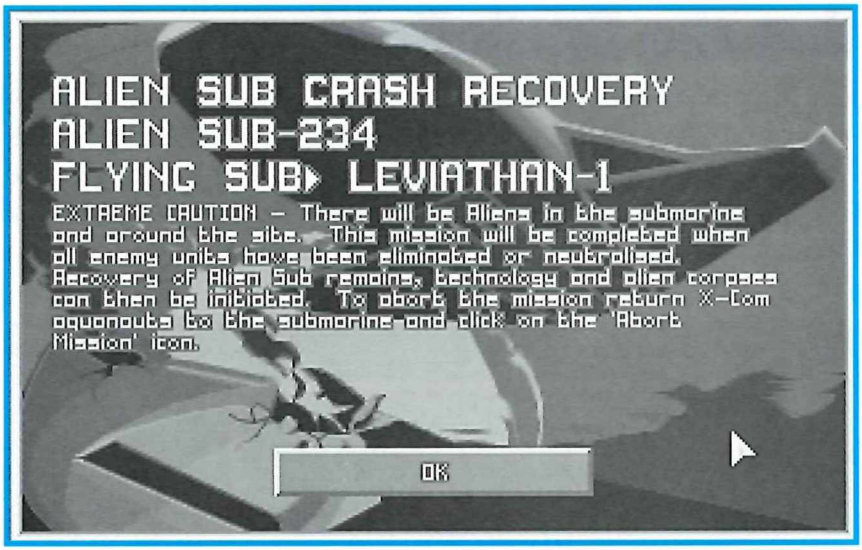


Figure 6.9. Mission Briefing Screen.

Soldier Arming Screen

After the Mission Briefing screen, the Aquanaut Arming screen appears (see Figure 6.10). This screen is used to assign individual weapons and equipment to each of your aquanauts. The computer automatically assigns weapons and equipment to each soldier, but it usually does a poor job of giving the correct equipment to the most well qualified soldiers. To ensure that your solders have the best chance of survival, you should take the time to arm and equip each soldier individually.

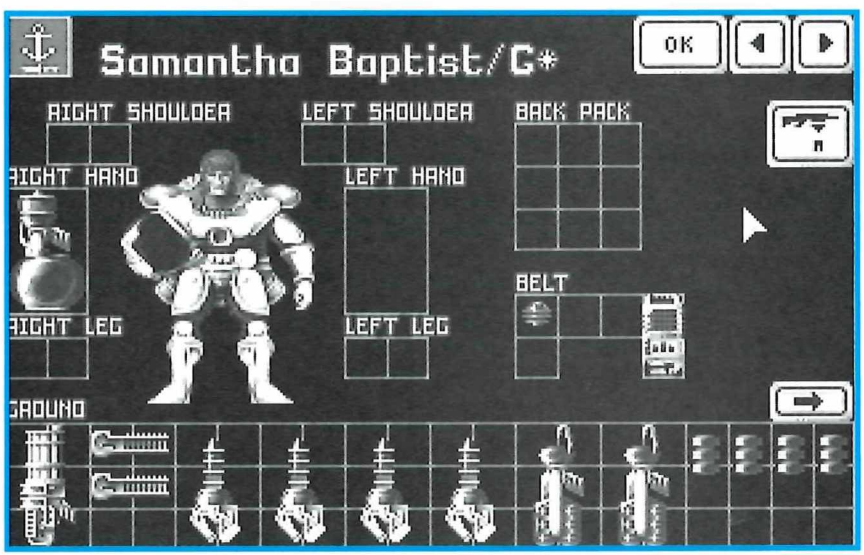


Figure 6.10. Arming aquanauts.

To assign the right weapons to the aquanauts that can use them most effectively, you should rely on two things: the soldier's specialization and his ability scores. If you followed the soldier specialization tips outlined in Chapter 5, "Aquanauts," you should be able to easily give each soldier a custom loadout that fits his area of expertise. For example, looking at a soldier named "Greg Baptist/G", you can immediately see that the "G" suffix indicates that he is a Grenadier-Medic, with a high strength and throwing accuracy. Using this specialization as a guide, you can quickly go through your available soldiers and equip them according to their weapon specialties.

For more detailed information on what a soldier can carry, simply select the soldier's rank icon in the upper-left corner of the screen. This opens a screen which displays the aquanaut's ability scores and combat statistics (see Figure 6.11). Most importantly, this allows you to see what the soldier's strength rating is, which directly translates into how much the soldier can carry.

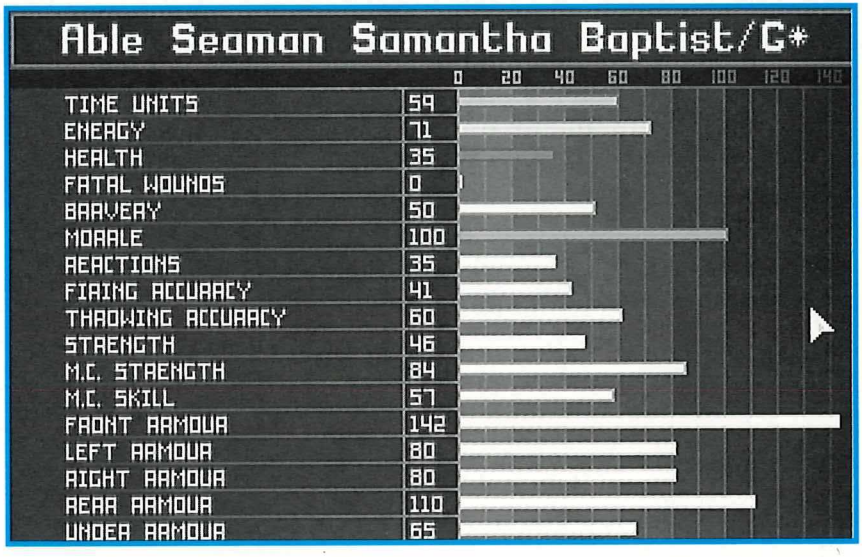


Figure 6.11. Aquanaut statistics.

Equipment, Strength, and Encumbrance

Having an acceptable strength rating is important for each soldier: the higher his strength, the more equipment he can carry without becoming encumbered. More specifically, if the combined weight of the equipment a soldier is carrying is greater than the soldier's strength ability score, the soldier becomes encumbered during combat, resulting in a loss of TUs and stamina. To calculate whether a soldier will be encumbered or not, simply add up the weight of all the equipment a soldier is carrying (using the data contained on Table 6.4 or on the reference card) and subtract it from the soldier's strength.

For example, a soldier with a strength rating of 36 is carrying the following equipment:

1 Disrupter Pulse Launcher	Weight: 14
4 Disrupter Pulse Ammo	Weight: 16 (4 ea.)
1 Vibro Blade	Weight: 10
	Total Weight: 14+16+10=40

As is, the soldier has exceeded his strength by four points. If encumbrance does exceed the soldier's strength, a penalty to TUs is applied. When combat begins, this soldier will have a smaller than normal allotment of TUs available. In addition, the soldier is much more likely to become fatigued and lose stamina during the course of battle.

Although it's a good idea to make sure your soldiers are never encumbered, it's helpful to sometimes push a soldier over his encumbrance limit. If a soldier repeatedly carries heavy objects in excess of his ability to carry them, his strength may increase.

Table 6.4. Equipment Weights.

Item	Weight	Notes
Missile Weapons		
Aqua Jet Launcher	18	Torpedo Launcher
AJ - Large Torpedo	6	
AJ - Phosphorous Torpedo	7	
AJ - Small Torpedo	5	
Dart Pistol	5	
Dart Pod	2	Ammo for dart pistol
Disrupter Launcher	14	
Disrupter Bomb	4	
Gas Cannon (GC)	14	

Item	Weight	Notes
GC - Explosive Bolt	4	Gas Cannon Ammo/High-Explosive (GC-HE)
GC - Phosphorous Bolt	4	Gas Cannon Ammo/Phosphorous (GC-P)
GC - Solid Bolt	4	Gas Cannon Ammo/Armor-Piercing (GC-AP)
Gauss Cannon	12	Heavy Gauss
Gauss Cannon Clip	4	
Gauss Pistol	4	
Gauss Pistol Clip	2	
Gauss Rifle	7	
Gauss Rifle Clip	3	
Harpoon Gun	8	Jet Harpoon rifle
Harpoon Pod	2	Ammo for Jet Harpoon rifle
Hydro Jet Cannon (HJ)	16	
HJ-AP-Shell	4	H. Jet Cannon Ammo/Armor-Piercing (HJ-AP)
HJ-HE-Shell	4	H. Jet Cannon Ammo/High-Explosive (HJ-HE)

Item	Weight	Notes
HJ-P-Shell	4	H. Jet Cannon Ammo/Phosphorous (HJ-P)
Sonic Blasta Rifle	6	
Sonic Blasta Rifle Clip	1	
Sonic Cannon	10	
Sonic Cannon Clip	1	
Sonic Pistol	4	
Sonic Pistol Clip	1	Sonic Pistol Ammo
Thermal Shok Bomb	1	
Thermal Shok Cannon	8	
Hand-to-Hand Weapons		
VibroBlade	10	
Thermic Lance	12	
Heavy Thermic Lance	14	
Thermal Tazer	6	
Grenades		
Magna-Blast Grenade	1	
Dye Grenade	1	
Particle Grenade	2	
Magna-pack	3	
Sonic Pulser	1	
Other Equipment		
Chemical Flare	2	
M.C. Disrupter	6	
M.C. Reader	7	

Item	Weight	Notes
Medi-Kit	4	
Particle Disturbance Sensor	2	
Bodies and Corpses		
Aquanaut*	35	
Aquatoid*	30	
Gill Man*	40	
Lobster Man*	45	
Tasoth*	40	
Calcinite*	30	
Deep One*	35	
Bio-Drone*	30	
Tentaculat*	40	

** Weights apply for both corpses and unconscious aliens/aquanauts.*

After you've outfitted all your aquanauts, you're ready to hit the battlefield. Click **OK** in the upper-right corner of the screen to exit the aquanaut arming screen and enter the battlescape.

The Battlescape

Whenever your soldiers engage in man-to-alien combat with the enemy, the action takes place on the battlescape. The battlescape gives you a three-dimensional, isometric view of the battlefield and all the objects currently visible to your soldiers. Figure 6.12 shows a view of the battlescape.

Figure 6.12. The Battlescape.

At the bottom of the screen is a strip of control buttons, referred to as the Battlescape button bar. Using the buttons contained in this area, you have a great deal of control over all the actions of your soldiers (see Figure 6.13).

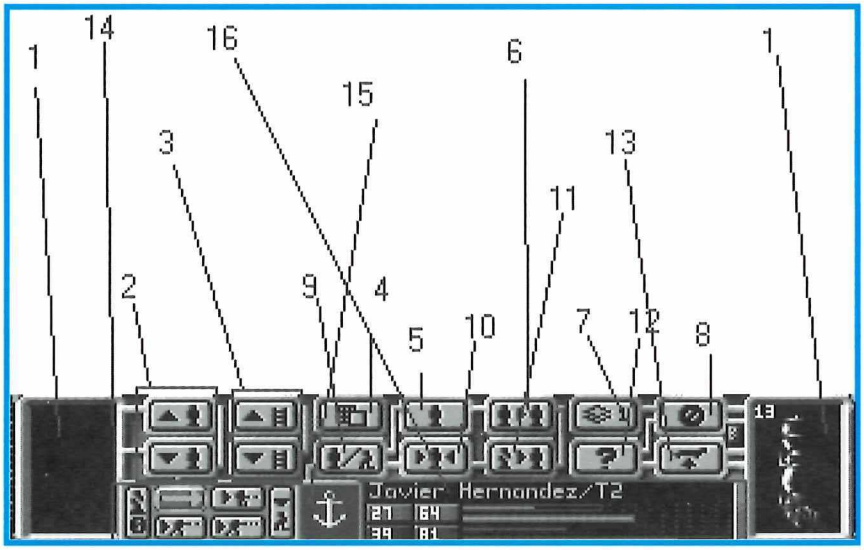


Figure 6.13. The Battlescape control bar with callouts.

These buttons include the following:

- Left- and right-hand boxes (1)

  These two boxes are used to indicate what the currently selected soldier is carrying in his left and right hands.

- Ascend/Descend buttons (2)

  These two buttons are used to make an aquanaut move up or down an elevator or to change altitude (if he is wearing magnetic ion armor).

- Terrain level (3)

  These buttons are used to add or subtract terrain levels from the battlescape. Use these controls to remove tall buildings and foliage that may block your view of your soldiers.

- Overhead map (4)

  Selecting this button gives you a two-dimensional, overhead view of the battlescape. Objects shown on the overhead map are color-coded as follows:

  Blue: Alien Units
  Yellow: X-COM units
  Red: Civilians
  White "X": Dead aquanauts or aliens

- Equip aquanaut (5)

  Use this button to access the selected aquanaut's inventory.

- Select next aquanaut (6)

  Performs two functions: first, it moves to the next aquanaut without ending the turn. Second, it moves to the next aquanaut and ends the previous aquanaut's turn.

- Options (12)

  This button accesses the battlescape game options screen. Using this feature you can save games and adjust game speed and map scrolling.

- Split level view (7)

  Use this button to toggle how all the terrain and objects are displayed on the battlescape. The first setting displays all levels of terrain, while the second just displays the lowest level.

- End turn (8)

  Select this button to end the current game turn.

- Abort mission (9)

  The button is used to abort the mission.

Bottom strip

- Reserve time unit icons (14)

  Starting at the far left and going clockwise, these buttons are zero time units, free movement, snap shot, kneel, auto fire, and aimed shot.

- Rank (15)

  This displays the currently selected soldier's rank. Also, it brings up the aquanaut data screen.

- Stand/Kneel (9)

  Use this button to force a soldier into a standing or kneeling position.

- Center display (10)

  Click this button to center the view on the selected aquanaut.

- Aquanaut data (16)

  Click this button to bring up the aquanaut data screen.

- Deselect aquanaut/select next aquanaut (11)

  This deselects the current aquanaut and selects the next one.

Choosing and Moving Aquanauts

A hollow rectangular box appears when you move your mouse over the battlescape screen. Left-click to activate the aquanaut under the cursor. Alternatively, you can use the Select Aquanaut buttons on the button bar to find the soldier you want, or use the Equip Aquanaut button and use the arrow buttons.

After the aquanaut is selected, simply move the box to where you want him to go and press the left mouse button. Your view of the battlescape is limited to a narrow viewpoint; to view other parts of the battlescape, simply move the mouse pointer to the extreme top, bottom, left or right of the screen and your view scrolls in that direction. You can click the right mouse button to turn the aquanaut without moving the aquanaut to another position.

Deployment

When you first see the battlescape, all of your aquanauts are waiting patiently in the landed transport. Moving your soldiers out of the transport is quite possibly the most dangerous part of the tactical combat portion. To help keep your aquanauts alive during the deployment, use the following steps:

1. Check the overhead map.

   Even before one soldier steps out of your transport, you should check the overhead map to get a preliminary view of the terrain. You can also see how close your transport is to a map edge or corner, which may alter your deployment strategy.

2. Open the door and peek outside by right-clicking.

   After you've taken a look at an overhead view of the battlefield, have one of your soldiers open the door to the transport and peek outside to spot any aliens nearby. If there are any aliens next to the transport, simply fire at the aliens or throw grenades and Sonic Pulsers towards their location.

3. Gradually move aquanauts out of the ship.

   When you're certain that the area immediately outside the transport is free from aliens, move your aquanauts out of the transport in groups of two or three. As soon as they're outside of the transport, head for nearby cover or move around the transport to check for aliens that may be hiding on the other side.

If good defensive terrain is nearby, you may want to quickly move the aquanauts next to the terrain as soon as possible.

Covering the Dispersal

As mentioned previously, exiting the transport is one of the most dangerous aspects of combat in TFTD. To minimize the chances that your soldiers will be hit by enemy fire, some players like to throw Dye Grenades around the perimeter of the landing area. The clouds of smoke from the Dye Grenades partially obscure your soldiers from view. Unfortunately, this tactic can be a double-edged sword: the aliens may be less likely to spot you, but you're also less likely to spot any aliens nearby. Clouds of smoke (or particles, as the case may be underwater) also reduce the firing accuracy of your soldiers if they try to aim and fire at an enemy while wreathed in clouds of silt.

Deployment Strategy

When the area around the door of your transport is secure, you can begin an orderly dispersal of your troops. There are a few points to remember:

- Don't bunch up in front of the transport to fire at aliens. Aquanauts behind them will be unable to move, inviting grenade attacks by aliens. Instead, keep aquanauts continuously moving away from the transport. If you do spot an alien during the dispersal, use a soldier that has already moved away from the transport to kill it. This keeps the transport exit clear.
- Move your soldiers out quickly, but be mindful to leave them enough TUs for firing at any enemies they encounter. It's also a good idea to keep soldiers at least 7-8 spaces apart from one another, lessening the chance that two soldiers will be killed in a single grenade blast.
- Head for and secure the nearest batch of defensible terrain. In most combat sites, there is usually a clump of terrain, a building, or some other defensive structure fairly close to the transport. When you've secured the perimeter around the transport, move your soldiers into the defensive terrain as soon as possible.
- Refer to the specific chapter dealing with your combat situation in Table 6.1.

Movement

Movement in TFTD is a lot like chess. First, you get the opportunity to move all of your units. When you're done moving your aquanauts, your turn ends. The computer takes over next, controlling the aliens in what is called the *alien movement phase*. Important to both sides is the concept of opportunity fire. If a soldier has enough TUs remaining at the end of your turn, he may be able to spot and fire upon aliens that come across his path in the alien movement phase.

All actions on the battlescape that soldiers undertake cost a certain amount of time units. You can consider TUs as sort of a battlefield currency, spent to move soldiers, fire weapons, and use devices. Crossing open terrain exacts a low cost in TUs, while moving aquanauts across rough or hilly terrain costs a correspondingly greater amount of time units.

Opportunity Fire

When you have finished your turn and have clicked the end of turn icon, the alien movement phase should begin. You should pay careful attention to what goes on during this phase by watching your screen carefully. If an alien moves into the line of sight of any of your soldiers, the game shows you exactly what your soldier sees. In many cases, the aliens will move into sight, spot your soldiers, and then move back out of view. If you weren't watching the screen when this happened, you would have never known that the alien was lurking out there. When this happens, pay special attention to the objects and terrain surrounding the alien. If the alien isn't visible when your turn is up, you still have a good idea of where the alien is hiding.

Even if you can't see the aliens, they may leave tell-tale signs of their location. An alien may spot and fire upon your soldiers from a hidden location: keep your eyes peeled and remember where the shot came from, and then you'll be able to take the necessary steps to eliminate or diminish the threat from that source. During the alien movement phase, you'll be able to hear the aliens moving about the screen, even if they aren't visible. Pay attention to the sounds you hear: opening and closing doors make distinct types of sound, allowing you to pinpoint which door an alien is hiding behind. Aliens also tend to leave doors open after they've entered a building, making open doors on a building a tell-tale sign that an alien may be inside.

The length of the alien movement phase can also be helpful. The alien movement phase takes longer if there are more aliens in the combat site; if the aliens take several minutes to complete their turn, you can be certain that there are quite a few on the battlefield. If the alien movement phase only takes a few seconds, chances are there are only one or two aliens left.

If you have a very fast computer, the alien movement phase will be shorter than normal. Keep this in mind as you're hunting down the aliens.

As stated previously, the Hydro-Jet Cannon and the Torpedo Launcher cannot be used on land—they are for *underwater use only*. However, these weapons can be used on land during certain circumstances. More specifically, these weapons can be used by aquanauts who manage to spot and fire upon aliens during the alien movement phase. A harmless programming bug, this "feature" makes the aforementioned "underwater" weapons a bit more useful.

Controlled Movement

When moving your soldiers across the battlefield, it helps to have a strategy as to how your soldiers will cover for one another as they advance. There are two primary strategies for moving your soldiers: *overwatch* and *slow but steady*.

1. Overwatch

   In this strategy, you move roughly half of your soldiers while the other half covers the advance of the former. This develops into a "leapfrog" motion, with soldiers taking turns moving and watching for signs of aliens. This movement method allows your soldiers to move faster than the "slow but steady" strategy, but is a bit riskier.

2. Slow but steady

   This strategy requires you to move all of your soldiers slowly, with all of them having enough TUs remaining at the end of the turn to fire on an enemy during the alien movement phase. Because each soldier only expends roughly half of his movement points during each turn, moving your soldiers across large distances can take quite a long time. This is the safest strategy, because every aquanaut on the battlefield will have enough TUs to defend himself if an alien appears.

Regardless of which movement strategy you employ, one of the most important principles in TFTD to use is that of *patience*. Carefully plan a strategy, and then systematically move your units to carry out the plan. Because combat is turn-based, take as much time as you need during your turn to carefully position and move your units.

If you want to quickly zero out a soldier's TU points, simply point and right click on the zero TU button.

Instead of moving through doors to open them, simply stand in front of the doors, move the cursor one space beyond, then right click. The door will open, costing the aquanaut who opened the door no TU points at all!

If you find one of your aquanauts on the top floor of a submarine, building, or other structure and you need to get down to ground level in a hurry, don't worry about taking the stairs down. All TFTD aquanauts can jump from any elevation to the ground without taking any damage.

Fire Teams and Formations

To make managing your troopers a bit easier, it may be useful for you to adopt the twin principles of fire teams and formations. These principles are loosely based upon the tactics and strategies employed by real-world infantry commanders. If you've ever seen combat footage of an elite infantry team in action, you'll see that they deploy and move into the combat area with precision and in a particular formation. You won't see elite teams of Navy SEALs or Army Rangers casually streaming onto the battlefield in rag-tag fashion. Likewise, your X-COM troopers should be deployed and moved about the battlefield with some overall tactical plan.

Fire Teams

Fire teams are important because they allow soldiers to give each other support, both in terms of spotting *and* firing upon any enemy soldiers they encounter. At the most basic level, a fire team can consist of two soldiers. While one soldier moves forward, the other covers his advance from a concealed position. When the first soldier has reached his

objective, the second soldier moves forward. These two soldiers then take turns covering each other, making sure that any enemies don't sneak up on them.

Granted, attempting to make your way through a large battlefield crawling with aliens with just two troopers would be utter lunacy. Ideally, you should enter the battlefield with around 8 to 12 soldiers. Take less than that, and you're risking not having enough firepower for the mission. You can—and should—take more soldiers in some missions, but I've found that having too many soldiers means that they're often getting in each other's way. Personally, I feel that taking 8-12 troopers and/or SWS platforms gives you the best combination of firepower and flexibility.

Formations

After you've divvied up your troopers into self-supporting fire teams, you can next think about giving those fire teams a formation. Organizing your soldiers into formations gives you the following three primary benefits: concentration of firepower, improved defensive strength and ease of movement.

Firepower

Soldiers in formation tend to spot and fire upon enemies as a unit, making a formation a dense concentration of firepower which you can use to blast through the enemy. One soldier may see an alien but not have enough time units to fire at it. However, the two soldiers next to him in formation may be able to fire and hit the alien.

Defense

A formation also imparts extra defensive value to your troopers. Instead of hunting for aliens with only one set of eyes, working in a formation gives you many more vantage points with which to spot the enemy. Most formations also have a trooper dedicated to guarding the rear of the formation, ensuring that you won't be surprised by aliens sneaking up on you from behind.

Movement

When you put your soldiers together in a visual formation, it becomes much easier to move your soldiers as a group. Far too often you may be tempted to send a solitary

soldier off on a wild goose chase to hunt for a wounded alien, only to see him end up another casualty. If your soldiers aren't in formation, it becomes far too easy to overlook a solitary trooper standing where he shouldn't be. A formation provides a visual device which prevents you from overlooking individual soldiers.

Formation Basics

Regardless of the formation type you choose, the lead position in any formation should always be occupied by a designated point man with excellent score in the following areas: reactions, firing accuracy, and time units. A fast-acting point man can hopefully spot, fire upon, and kill any alien soldiers before they have the chance to fire at your unit. It's important to have overlapping fields of fire in your formation, so make sure that every trooper is facing a slightly different direction. Placing your heavy weapons personnel at the outer edges of your formation ensures that massive firepower can be directed to the front, rear, and sides without worrying about hitting your own soldiers.

Formations: Open Terrain vs. Close Quarters

The terrain in which you find yourself will factor heavily on which formations you eventually decide to use. The tight, cramped confines of a cruise ship will preclude the usage of anything but the smallest formations, restricting your soldiers to advancing together in small groups of 2-3 soldiers each.

To summarize, remember that close quarters and cluttered landscapes generally require more units consisting of fewer troopers. Wide-open terrain allows you to employ and experiment with any of the formations discussed here.

Formation Types

Two-Man

The two-man formation is the smallest formation available. In reality, it isn't a formation *per se*—it simply is two soldiers covering each other as they advance. Regardless of the terrain, mission type or any other factors, you should *always* move your squaddies in groups of at least two soldiers (see Figure 6.14).

Figure 6.14. The two-man formation.

Advantages:

The smallest formation, the two-man is the easiest to set up and maintain. It is by far the best formation type for close-quarters fighting, where large numbers of soldiers can lend mutual support by covering passageways and other avenues of alien approach while other soldiers advance.

Disadvantages:

Whereas formations with three or more soldiers have a substantial reserve of firepower to draw upon, the soldiers in a two-man formation are woefully outgunned. Because the two soldiers can only watch two directions, the chance of an ambush is increased. One soldier may spot an alien, but the other soldier usually won't be facing the same direction to lend any fire support.

Column

The column formation places your troopers in a single line, with each soldier facing a slightly different direction (see Figure 6.15). The last soldier in the formation should be turned to face the rear, guarding the flanks of the units from any alien attacks. Heavy weapons personnel should be spaced equally throughout the formation, one facing to each side of the formation.

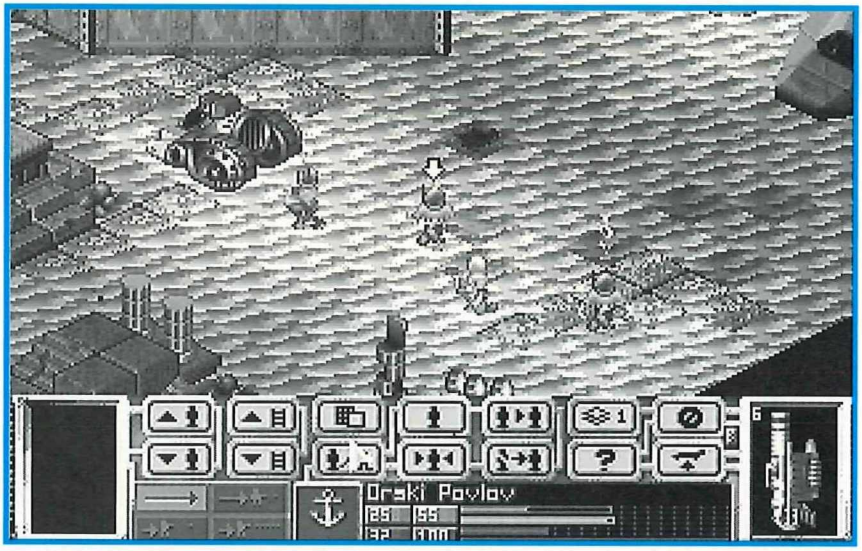


Figure 6.15. The column formation.

Advantages:

In this formation, your team presents a relatively small target when facing the enemy. This formation works well when an SWS platform (such as a Coelacanth submersible tank) is placed in the front-most position. Soldiers are then shielded behind the bulk of the vehicle as they advance. Firepower to the left and right sides of this formation is very good, because all troopers can simply turn and fire upon a threat that appears on either side.

Disadvantages:

This formation presents a wide target when viewed from the side, making it a poor choice for terror site missions. Firepower directly to the front and rear of this formation is very weak, because only one or two soldiers can fire at an enemy approaching from these directions. Keeping your soldiers facing in different directions is vitally important in this formation. If a rookie soldier towards the rear of the formation is facing forwards and spots an enemy, he'll try to fire through the soldiers between him and the target, usually with disastrous results.

Diamond

The diamond formation takes the form of a four-pointed star, with one trooper facing each compass position. Normally, your point man would face towards the direction of your advance, while the troopers occupying the left and right positions would look forward, angled slightly to the left and right, respectively. Finally, the trooper in the rear position would face towards the rear.

Figure 6.16. The diamond formation.

Advantages:

Because a soldier is covering each compass point, the diamond formation is ideal for a defensive posture. This formation is usually adopted when establishing a perimeter around a landing craft, defending a fixed location, and/or escorting a wounded soldier to a safe location.

Disadvantages:

Because each soldier is usually facing a different direction, this formation is of little use in an offensive role. Soldiers are also grouped more closely together than in any other formation, making them especially susceptible to area effect weapons such as grenades, torpedo launchers, and other powerful weapons.

Echelon

The echelon formation places your soldiers in a staggered line, called the "echeloned" flank. The echelon formation is ideal if you expect to face an enemy presence either to the front and/or one of your flanks. When using this formation, it is a good idea to position a map edge or obstacle to the flank opposite the echeloned flank. For example, a team of aquanauts in echelon right formation should have either the map edge, impassable terrain, or a secured area of the battlescape to their left (see Figure 6.17).

Figure 6.17. The echelon right formation.

Advantages:

This formation has very good firepower and spotting ability to the front and to the echeloned flank. Using the suggestions outlined above, this can be a very effective formation when employed along map edges and next to large structures.

Disadvantages:

This formation can be hard to control and soldiers in this formation have poor line of sight and firepower to the rear and on the non-echeloned flank.

In-line

In this formation, all of your troopers walk abreast in a ragged line (see Figure 6.18). The point man should walk slightly ahead of the rest of the unit, with heavy weapons personnel placed on the extreme ends of the formation.

Figure 6.18. The in-line formation.

Advantages:

This formation provides the most powerful forward field of fire available. Because all your troopers are basically facing the same direction, you can lay down a withering barrage of fire towards anything that crosses your path. Because your soldiers are walking next to one another, the chances for friendly fire casualties are all but eliminated. This formation works well as a moving screen, serving to shield less heavily-armored soldiers following to the rear from enemy fire. This formation works best when you're facing a large concentration of aliens grouped together in one map location.

Disadvantages:

Line of sight and firepower to the left and right of this formation is very poor, making this a poor formation for use in combat areas where aliens may be attacking from a variety of compass points.

Vee

One of the more popular formations, the vee-wedge configuration is a good all-around combat posture. Soldiers are arranged in the shape of a "V", with a soldier with high firing accuracy or a grenadier placed at the "hinge" of the "V" (see Figure 6.19).

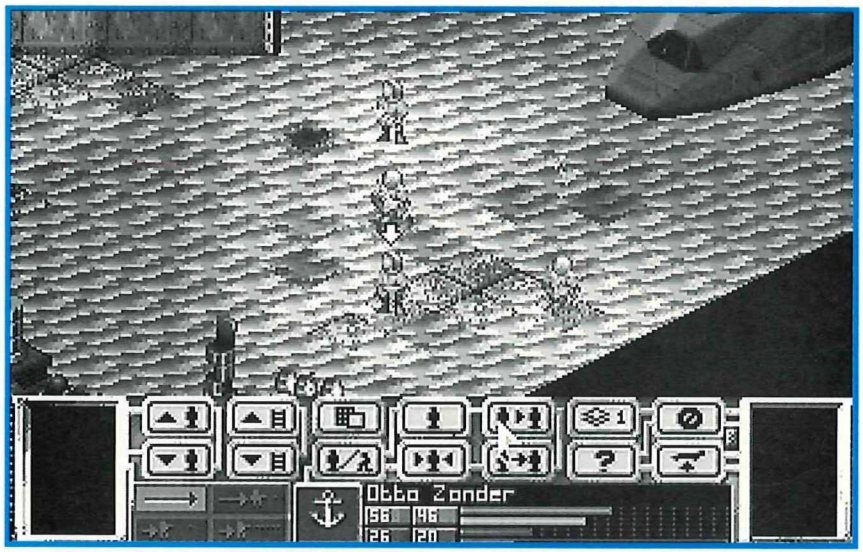


Figure 6.19. The vee formation.

Advantages:

The vee provides good, overlapping fields of fire to the front, left, and right. The two front-most positions are usually best occupied by scouts with quick reactions, while a grenadier can serve in the "hinge." This formation can project firepower best to its front sides, with weak firepower to the rear.

Disadvantages:

This formation is a compromise of sorts. The in-line formation offers better forward firepower, the diamond formation offers better defensive capabilities, but the vee is close to both in terms of effectiveness. Like the diamond formation, troopers arranged in a vee are somewhat more susceptible to area effect weapons. The soldier placed at the "hinge" is vital to the success of this formation; placing a soldier with poor firing accuracy can be disastrous, because he may hit his fellow soldiers when firing upon aliens that he sees to the front of this formation.

Wedge

One of the more popular formations, the wedge configuration is a good all-around combat posture. Soldiers are arranged in the shape of an inverted "V." This formation is used more often than most, because it is well suited for many different types of combat situations (see Figure 6.20).

Figure 6.20. The wedge formation.

Advantages:

The wedge provides good, overlapping fields of fire to the front, left, and right. This formation can project firepower best to its front and both flanks, with poor firepower to the rear. The wedge formation is arguably the most effective formation for most combat missions.

Disadvantages:

The wedge can be difficult to control at times, and soldiers arranged in wedge formation are somewhat more susceptible to area effect weapons such as Sonic Pulsers and Disrupter Pulse Bombs.

Table 6.5. Movement Formation Summary.

Formation	# Aquanauts	Advantages	Disadvantages
Two-man	2	Easy to set up and maintain. Best close quarters formation.	Poor open-field formation.Poor fire, visibility in all dir.
Column	3-10	Easy to set up and maintain. Good fire to flanks.	Poor visibility to front and rear.
Diamond	4-8	Best defensive formation. 360 degree LOS, fire coverage.	Difficult to set up and maintain. Poor offensive formation.
Echelon	3-10	Good fire to front and echeloned flank.	Difficult to set up and maintain. Poor protection to rear and non-echeloned flank.
In-line	2-10	Easy to set up and maintain. Excellent forward field of fire.	Poor flank and rear protection.
Vee	3-8	Good forward field of fire. Strong protection on left and right flanks.	Difficult to set up and maintain.
Wedge	3-8	Good forward field of fire. Strong protection on left and right flanks. Best all-around formation.	Difficult to set up and maintain.

Formation Examples

Now that you've been introduced to a variety of infantry formations, we'll take a look at the use of these formations in combat. If you've eliminated all the aliens in an area except for a small group holed up in one location (such as a trio of Tasoth hiding behind a coral reef), the in-line formation is the best to use. Because all the soldiers in this formation generally face forward, you can be assured that most of them can spot and fire upon the enemy. This formation is also well suited to sweeping across vast areas of terrain, and is particularly useful if you have at least ten soldiers.

In areas where aliens are lurking in every direction, the vee-wedge and diamond formations are better choices. If you're fighting a defensive battle—such as securing a perimeter around a landing craft so that other soldiers can debark and enter the battlefield—the diamond formation is ideal. If you're moving towards an objective, the vee-wedge formation gives you adequate defensive capability at all sides plus a potent offensive punch to the front.

In some scenarios, you'll find your troopers out in the open—with nothing to hide behind—as a powerful group of aliens moves towards you. If you happen to have an SWS, simply line your troopers up in column formation behind it and head for cover.

Regardless of the formation you use, it's important to change or break your formation if the situation warrants doing so. Fighting your way through the narrow, twisting corridors of an alien vessel may not be conducive to using any formation. In such cases, using a two- or three-man fire team may be a better option.

Submersible Weapon Systems

In addition to regular X-COM soldiers, you can employ Submersible Weapon Systems (SWSs) to aid you on the battlefield. Much like computer-controlled tanks, SWSs are heavily armed and armored (see Figure 6.21). At the start of the game, you can purchase SWSs from your Purchase/Recruit screen. Unfortunately, these first SWSs are lacking in defensive and offensive capability. Only after you've researched the requisite alien technologies can you begin building the more powerful SWSs, such as the Coelacanth equipped with a Gauss Cannon.

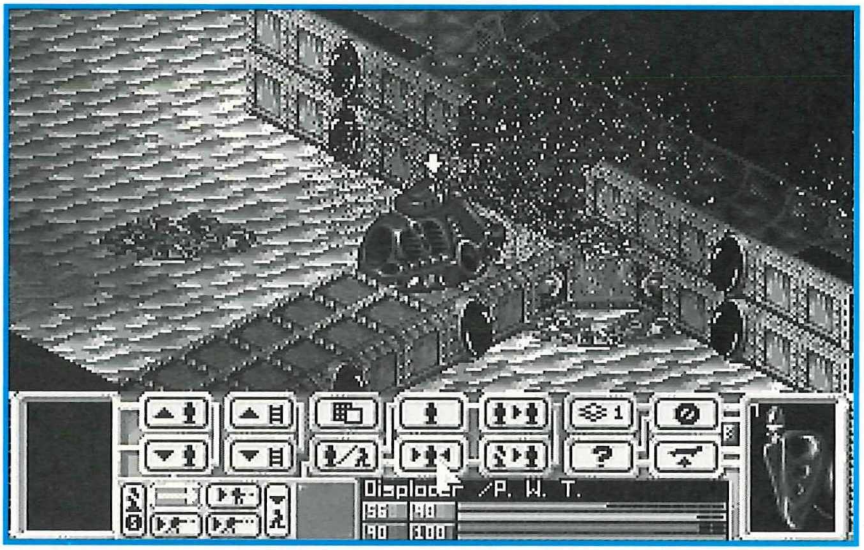


Figure 6.21. Clearing a path for a Displacer.

In some missions, you may find that your SWS platforms are too large to fit through many doorways. To clear a path for your support vehicles, simply use a Disrupter Pulse Bomb or a series of Sonic Pulsers on the wall directly to the right or left of the door. Clear the area, and then launch the bomb or throw the grenades. After the smoke clears, the wall should be destroyed, creating a two-space door which the SWS can narrowly fit through.

There is a great deal of debate among X-COM players whether SWSs are really worth the space and high cost. Some players say that four soldiers are better than one SWS, while others never enter the battlefield without at least two—and sometimes three—SWSs in their X-COM squad. The truth is, SWSs have their own strengths and weaknesses, just like the formations discussed earlier.

Advantages:

Bringing a heavy weapon platform along with you to combat gives your squad a number of advantages. Most SWSs are solidly constructed and covered in thick sheets of armor, making them perfect for absorbing weapons fire that could do irreparable harm to a flesh and blood trooper. Used as a mobile shield, an SWS can act as a screen behind which your troopers can seek cover while advancing towards an objective. SWSs also have lots of TU points, making them perfect for rooting out hidden aliens. Finally, all SWSs are totally immune to mind control. While even your bravest troopers may eventually turn tail and run if the battle is going against them, SWSs will stand fast. If you're going up against aliens with mind-control abilities—like the Tasoth—you are well-advised to take at least one SWS with you. SWSs are also very capable as scout vehicles because of their high TUs.

Disadvantages:

SWS platforms—especially Displacers—can cost a great deal of money and materials to build. They also take up a great deal of space; one SWS consumes the equivalent space of four regular soldiers, while taking two SWS platforms takes up a whopping 8 spaces. Because the SWS is a single unit, it supplies only one viewpoint during the battle. The more SWSs you have, the less likely you are able to spot some hidden alien in a well covered hiding place. SWS platforms cannot be re-loaded during combat. This means that in large multi-part missions (such as artifact sites, alien colonies, and T'leth) an SWS—especially Coelacanth Hydrojets and Sonic/PWT Cannons—may run out of ammo and become nothing more than an unarmed scout.

In general, you should take at least one SWS with you on any mission involving mind-controlling aliens, maybe even two when attacking large alien bases. Generally, however, you should opt for taking more soldiers. When you consider that two SWSs take up the space of eight soldiers, you can see that SWSs aren't much of a bargain. Compared to two SWSs, eight soldiers can spot, shoot, and destroy far more aliens. A bigger squad also lets you explore more terrain in less time, making it less likely that aliens will be able to sneak around behind you.

Sometimes you'll see a target identifier appear in the lower-right corner of your screen when you can't actually see any aliens. Although you can't see the alien from your perspective of the battlefield, your soldier can. In order to fire on such a target, follow these steps. First, select your shot option (auto, snap, or aimed shot), and then click on the target identifier in the lower-right corner of your game screen. The screen then centers directly on the target in question. Next, move your cursor so it rests directly above the soldier inventory icon. Finally, move the cursor slowly in a straight line towards the top of the screen. The cursor turns yellow and begins flashing when it rests on an enemy unit. Simply click the mouse button and watch the fireworks!

Cover and Concealment

Whenever you move your soldiers, it's important that they end their movement phase next to or behind some sort of cover. Depending on the combat mission you're on, there should be a wide variety of obstacles, terrain, and structures which your soldiers can hide behind as they advance. Advancing out in the open across uncluttered terrain will normally get your soldiers killed. Instead, have them advance by moving next to an object and end their turns behind rocks, tires, coral reefs, small hills, or any other piece of terrain on the battlescape. Even the smallest piece of coral can provide some protection from enemy fire. Keeping your soldiers hidden behind terrain and other obstacles also makes them less likely to be spotted by aliens during the alien movement phase.

Always hide behind something; it could mean the difference between a wound or death! Of course, that also means that you must have enough TUs. If you have Magnetic Ion Armor, do not stay off-floor unless you have something to hide behind also.

To spot aliens, especially in upper levels you can kneel, stand to throw grenades, and so on.

Sometimes you'll see a target identifier appear in the lower-right corner of your screen when you can't actually see any aliens (see Figure 6.22). Although you can't see the alien from your perspective of the battlefield, your soldier can. In order to fire on such a target, follow these steps. First, select your shot option (auto, snap, or aimed shot), and then click on the target identifier in the lower-right corner of your game screen. The screen will then be centered directly on the target in question. Next, move your cursor so it rests directly above the soldier inventory icon. Finally, move the cursor slowly in a straight line towards the top of the screen. The cursor will turn yellow and begin flashing when it rests on an enemy unit. Simply click the mouse button and watch the fireworks!

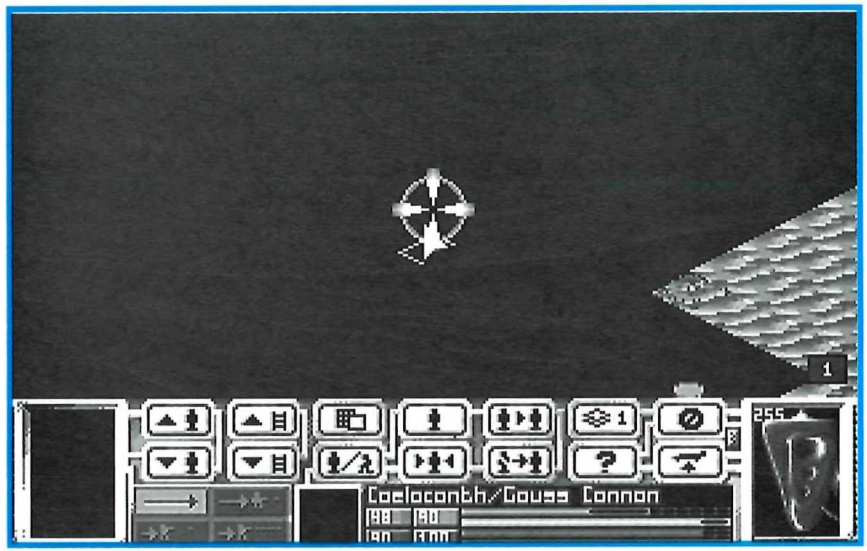


Figure 6.22. Line of sight glitch.

Combat

Using Ranged Weapons

To use a ranged weapon, the soldier must have it equipped in either hand. To use it, click on the hand holding the weapon. In the menu that appears, select the type of firing method you want to use, and then select your target.

Firing Methods

Snap

Nearly all ranged weapons have this firing method as an option. The most common firing method, the snap shot gives a good chance to hit an alien but costs a relatively small percentage of time units to use.

Aimed

If you want to make each of your shots count, use the aimed firing method. This option requires the greatest amount of TUs to fire, but it also has the greatest chance of hitting the target.

Auto

Although it has the worst chance of all firing types to actually hit the target, the auto firing method compensates by firing three shots instead of just one. This firing method—if available—is most effective when the target isn't very far away.

Firing accuracy is increased if:

- Your aquanaut is kneeling.
- You're firing at a large target.

Firing accuracy is decreased if:

- Your aquanaut is wounded.
- The target is small (i.e., Aquatoids are harder to hit than Triscenes).

Using Thrown Weapons

To use a thrown weapon, the soldier must have it equipped in either hand. To use it, click on the hand holding the weapon. All grenades need to be primed before you throw them—priming allows you to set the number of turns that will expire before the grenade goes off.

Priming a Particle Disturbance Grenade does not allow you to set a number of turns until the grenade goes off. Instead, priming a Particle Disturbance Grenade simply turns the grenade "on." To use, simply throw the primed grenade at the target. When something moves within range, the primed grenade will detect the movement and explode.

Throwing accuracy is increased if:

- Your aquanaut is kneeling.

Throwing accuracy is decreased if:

- Your aquanaut is wounded.
- The target is an extreme distance away.

Have you primed and thrown a Particle Disturbance Grenade in front of an alien, only to find that he goes around it? Now the grenade is blocking *your* path. Instead of sacrificing a rookie trooper as a mine clearer, simply save the game and exit TFTD. Re-start the game and re-load your saved game, and all the Particle Disturbance Grenades that were primed and on the battlefield are now *un-primed*!

Using Hand-to-Hand Weapons

To use an item such as a Vibro Blade, Thermic Lance, or Thermal Tazer in combat, you must first be standing right next to your target. You must select the attack option before you throw the object. Left click on the hand holding the weapon, and then select the target by facing it; you don't need to use the cursor. The attack occurs automatically and no cursor appears.

Weapon Notes

Dart Gun and Harpoon Jet Rifle

The most basic weapons available in TFTD, the Dart Gun and the Harpoon Jet Rifle should be replaced with more powerful weapons as soon as possible. To their credit, these weapons do work well against the weaker alien races (such as Gill Men and Aquatoids) you'll encounter in the early stages of the game, and they can function both on land and underwater.

Gas Cannon

A heavy weapon system, the Gas Cannon can utilize one of three main ammunition types: high-explosive (HE), armor-piercing (AP), and phosphorous (P). You can rely on the Gas Cannon (and the Hydro-Jet Cannon) to provide heavy weapon capability until

more powerful weapons become available. Compared to the Hydro-Jet Cannon, the Gas Cannon is more accurate, weighs less and does more damage, but it lacks the larger clip size and auto-fire capability of the former. The Gas Cannon works equally well above and below water.

Hydro-Jet Cannon

Another heavy weapon system available from the outset, the Hydro-Jet Cannon is a versatile and effective weapon. Like the Gas Cannon, the Hydro-Jet Cannon can be loaded with high-explosive (HE), armor-piercing (AP), and phosphorous (P) rounds. Unlike the Gas Cannon, the Hydro-Jet Cannon has a larger clip size (12 rounds as opposed to 8) and has auto-fire capability. The Hydro-Jet Cannon is especially useful when loaded with HE rounds and given to rookies with relatively low firing accuracy.

Although the novice soldier is unlikely to hit anything dead center with a single shot, the ability to fire three shots in quick succession (auto-fire) and the explosive radii of the detonating HE rounds usually means that they can kill what they are aiming at. Caveats to this versatile weapon system include its weight and the fact that it only works underwater.

Aqua Jet Torpedo Launcher

The most powerful weapons available to your aquanauts when the game starts, the Torpedo Launcher can be useful for taking out small groups of weak aliens (Aquatoids, Gill Men, and so on) and for clearing a path through dense terrain. Torpedoes for this launcher come in both high explosive (HE) and phosphorous (P) ammunition types.

Unarguably, this weapon has a lengthy list of shortcomings: heavy weight, manual reloading, and underwater operation. For almost all situations, the Hydro-Jet Cannon and the Gas Cannon—equipped with HE rounds—are more effective weapons.

Gauss Weapons

Good interim weapons, but they generally weigh more (both guns and ammo) than sonic weapons. The heavy Gauss Cannon is particularly useless!

Sonic Weapons

Undoubtedly the most effective weapons in the game. Nearly all alien races carry some sort of sonic weaponry, ranging from Sonic Pistols to Sonic Cannons. Because of this, obtaining extra weapons and ammunition is usually a matter of fighting a combat mission and retrieving the weapons the aliens were using.

The Sonic Pistol is the best pistol in the game and the Sonic-Blasta Rifle is an unbeatable all-around weapon. The Sonic Cannon packs a powerful punch, but it is heavy and cumbersome, making it a weapon custom-made for the strongest aquanauts. Ammunition can be expensive to manufacture for these weapons (particularly because their manufacture requires Zrbite), but most ammunition can be found by defeating aliens in combat.

Thermal Tazer and Thermal Shok Cannon

De riguer for capturing aliens alive, these weapons are ideal for any capture mission.

Vibro Blades and Thermic Lances

Work great against Lobster Men!

Grenades and Explosives

Grenades, explosives, and Sonic Pulsers are some of the most versatile weapons in the X-COM arsenal. Sonic Pulsers give even the wimpiest squad of soldiers a powerful offensive weapon. Particle Displacement Grenades are effective in a variety of roles, ranging from blocking off doors and passageways to protecting your flanks from alien attacks.

Sonic Pulsers are not destroyed by the explosion of another Sonic Pulser. Try this strategy: give one soldier nine (9) Sonic Pulsers. Have him prime each grenade to "0" then have him stuff each primed grenade into his backpack. After all the grenades are primed, charge him towards the nearest concentration of aliens. The aliens will shoot him, and he'll fall to the ground, spilling out the grenades. End the turn. You'll see the first grenade explode ... followed by the second .. and the third .. and so on! Because the Sonic Pulsers aren't destroyed by the explosions, each grenade in the backpack will explode in turn, doing massive amounts of damage to everything in the area. Because a Sonic Pulser does 120 points of damage, this quickly adds up to over 1000(!) points of damage to anything nearby.

Particle Displacement Grenades detect movement within a range of one square around the primed grenade. For this reason, be sure to leave enough space around the grenade for your own soldiers to maneuver past it if they need to. If you need to get past an area guarded by one of these grenades, use molecular control on a nearby alien, then use the alien as cannon fodder to trigger the grenade.

Disrupter Pulse Launcher

The equivalent of mobile artillery, the Disrupter Pulse Launcher is unarguably the most powerful weapon in the game. A "smart" weapon, the bomb launched from a Disrupter Pulse Launcher can be programmed to follow a pre-determined set of up to ten waypoints, allowing it to go around corners, over intervening terrain and even through windows and up and down stairs.

Because the Disrupter Pulse Launcher has such a long range, you can equip an aquanaut with one of these weapons and place him far to the rear of the action. When the fighting gets hot and heavy for your troopers up on the front lines, this soldier can launch a disrupter bomb to quickly take out alien positions.

A Disrupter Pulse Bomb will only explode when it comes in contact with something, not when it hits the last waypoint in its flight path. For that reason, make sure that the bomb is programmed to either directly hit an alien or to collide with a nearby structure or piece of terrain on its last waypoint.

Equipment Notes

Medi-Kit

The Medi-Kit can be used to heal wounded soldiers, revive unconscious soldiers and boost the morale of soldiers that have been injured. If the soldier you want to heal is still conscious, you must move the soldier with the Medi-Kit next to that soldier. If the soldier is unconscious (visible on the battlescape as a body lying on the ground), you must move the soldier with the Medi-Kit so that he stands on the same square as the unconscious soldier. To use a Medi-Kit, the soldier must be holding the Medi-Kit in either hand. Left-click on the hand holding the Medi-Kit. On the next screen that appears, you'll be shown an image of the wounded soldier, along with three buttons on the right of the display. To heal a damaged body part, click on the wounded segment of the body then select the **HEALING** button. To attempt to revive an unconscious soldier, select the **STIMULANT** button. Finally, selecting the **PAIN KILLER** button restores some of the wounded soldier's morale.

Particle Disturbance Sensor

The Particle Disturbance Sensor is used to detect movement on the Battlescape screen. To use the sensor, place it in a soldier's right or left hand. Left click on the sensor, and then activate the sensor by left clicking on the **USE SENSOR** menu option. A screen appears, displaying any movement near the soldier. Large objects are represented by larger blips, while smaller objects are represented by smaller dots on the display. Unfortunately, the sensor only has a very short range, limited to detecting movement which is fairly close to the soldier using the device. Second, the blips on the screen don't identify what is moving: the movement could be caused by another soldier, a civilian, an alien, or an SWS platform. It also doesn't detect non-moving objects, so aliens that are patiently standing still will not be detected by the sensor. For these reasons, the Particle Disturbance Sensor is of very limited value.

Armor

Vital to the long-term health and well-being of your aquanauts is combat armor. At the start of the game, no armor is available to your troopers. Plastic Aqua-Armor will be the first combat armor you'll be able to research and manufacture, with Ion Armor and Magnetic Ion Armor becoming available after more research has been completed. For more information on the steps necessary to research these three armor types, refer to Chapter 3, "Money, Manufacturing, and Research."

If at all possible, each of your soldiers should be equipped with some form of armor at all times. Armor can (and often does) mean the difference between life and death for your troopers. Weapons fire which would almost certainly kill an unarmored soldier may bounce harmlessly off a suit of armor, or possibly inflict only a minor wound as opposed to a fatal one.

Table 6.6. Aquanaut Personal Armor Comparison Table.

Armor Type	$Cost	Front	Left	Right	Rear	Under
Plastic Aqua-Armor	$22,000	60	35	35	30	25
Ion Armor	$42,000	132	70	70	100	55
Magnetic Ion Armor	$58,000	142	80	80	110	65

$Cost: Cost to manufacture.
Front: Front armor rating.
Left: Left side armor rating.
Right: Right side armor rating.
Rear: Rear armor rating.
Under: Under (lower) armor rating.

General Combat Strategies

Be Unpredictable

Instead of walking through existing doorways and corridors, make your own! Use a few Sonic Pulsers or a Disrupter Pulse Bomb to create new doorways, flatten bothersome terrain, or eliminate other unwanted items on the battlescape. If your soldiers are equipped with Magnetic Ion Armor, have them fly up above the battlescape and then drop them down into the subs and structures in which the aliens are hiding, much like a underwater paratroopers.

When In Doubt, Blow It Up!

If you're not fighting a terror site mission and/or don't need to capture any aliens alive, go ahead and blow up as much of the battlescape as possible in your quest to kill aliens. If you think an alien is hiding behind a coral reef, throw several grenades into the area. If you have a good supply of Sonic Pulsers and Disrupter Pulse Bombs, put them to good use.

During most combat missions, your aquanauts may be able to spot aliens in other rooms by looking directly into the corner of a wall or submarine. A harmless program glitch, this "feature" allows you to sometimes spot aliens hidden in rooms and subs that you normally might not see.

Conserve TUs

Always leave enough time units for each soldier to fire at least one snap shot during the alien movement phase. A soldier with enough time units remaining can possibly shoot any alien he sees, preventing the alien from finding and shooting your soldiers first.

Kneel

A kneeling trooper not only improves his firing accuracy, but he also makes a harder target for the aliens to hit. Always reserve enough points (possibly by using the reserve TUs for kneeling button on the Battlescape button bar) to have a soldier kneel at the end of the turn.

Aliens

A vital part of any combat operation is a good working knowledge of your enemy. You'll face a number of aliens in TFTD, each with a widely varying range of strengths and weaknesses. In this section we'll take a look at each alien race and the tactics you should employ to defeat them.

General Tactics

If you analyze the data contained in Table 6.7, you can easily identify the strengths and weaknesses of each alien race. For example, Aquatoids have very little natural armor, so they're susceptible to just about any type of weaponry. Aliens with high strength ratings—such as the Triscene, Calcinite, Tentaculat, and Bio-Drone—usually have powerful hand-to-hand combat abilities, while aliens with high firing accuracies have a lethal ability to kill your soldiers at a distance. The armor values listed for each alien can also provide insight into how you should attack a particular race. Aliens with weak armor values are especially susceptible to grenades. Case in point: The Triscene is heavily armored on all sides, but its weak under armor makes it vulnerable to grenades and Sonic Pulsers thrown beneath it.

Aquatoid

Physically the weakest of all the alien races, Aquatoids can usually be felled by a single hit from just about any weapon. Grenades seem to work well against them, and their limited number of TUs means that they won't be able to move too quickly across the battlescape. However, higher-ranking Aquatoids do have the ability to use Molecular Control during combat, making them much deadlier than their puny stats would have them appear. Aquatoids seem to rely heavily on the use of Sonic Pulsers, so be sure to keep your soldiers spaced 7-8 squares apart during combat.

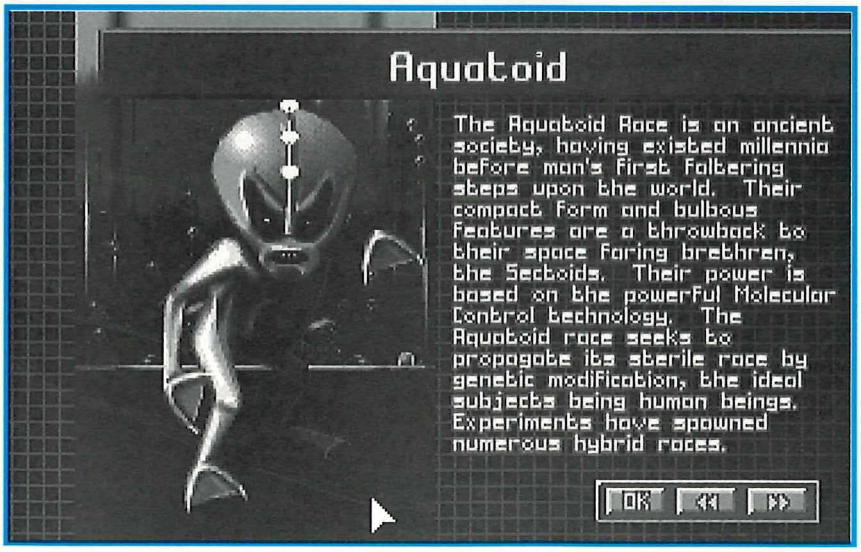


Figure 6.23. The Aquatoid.

Bio-Drone Terrorist

Fast, tough, deadly and able to fly, the Bio-Drone is easily one of the toughest aliens you'll face. Thankfully, they're usually encountered only during port, island, or shipping terror site missions. Bio-Drones have one of the highest firing accuracies in the game, making them deadly snipers. They are equipped with two weapons: a long-range sonic attack and a close-range electric shock. Bio-Drones also scorch the terrain they fly over, causing metal and plastic to blacken and wood and other flammable materials to burst into flames. You can often track Bio-Drones by following their scorched trail of destruction. Thankfully, they're not armored very well, and they usually succumb to pinpoint attacks by Sonic Blasta-Rifles and Sonic Cannons. Their weak under armor makes them susceptible to Sonic Pulsers and grenades, but only if they are at ground level. The biggest danger with Bio-Drones is their bothersome tendency to explode when destroyed. For that reason, attack Bio-Drones from a distance using sonic weaponry or grenades, and make sure that any civilians or X-COM troopers are a safe distance away from the dying Bio-Drone.

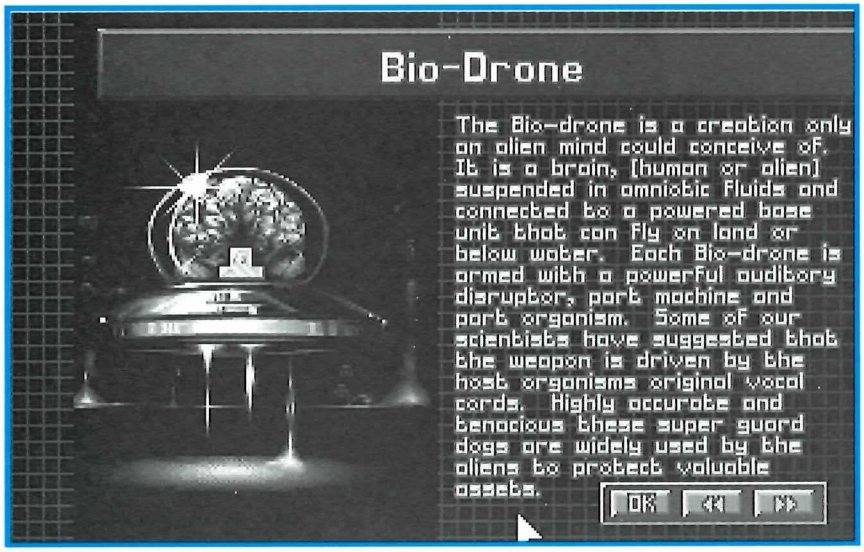


Figure 6.24. The Bio-Drone.

Calcinite Terrorist

Found mostly during terror site missions, the Calcinite only has one attack method: hand-to-hand. Civilians and soldiers without armor are most susceptible to their attacks, while aquanauts wearing ion or Magnetic Ion Armor are protected somewhat from the Calcinite's pugilistic onslaught. Because Calcinites can only attack from a distance, your best strategy is to shoot them with ranged weapons or use grenades to blow them to bits. They are fairly well armored, able to take several shots from weaker weapons (such as dart guns and harpoon rifles) before dying (see Figure 6.25).

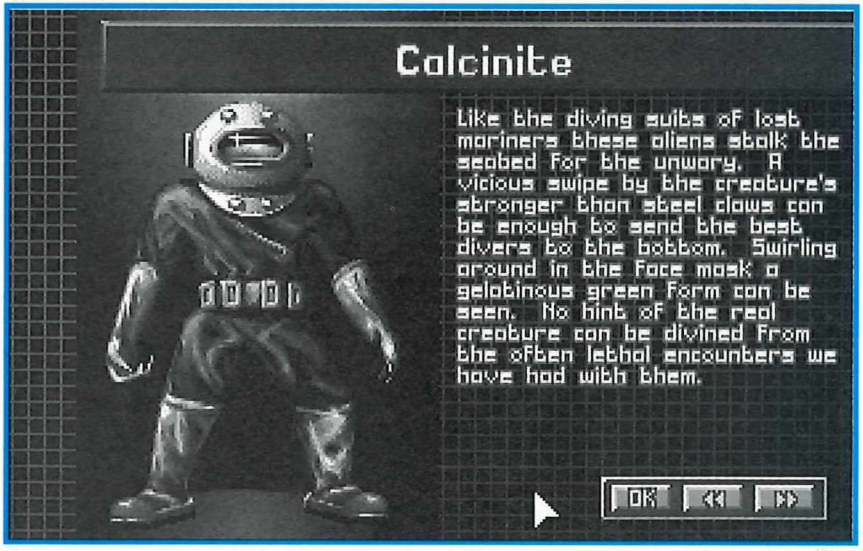


Figure 6.25. The Calcinite Terrorist.

Deep One Terrorist

These creatures usually accompany Gill Men on terror missions. Their only weapon is a short-range attack with an electrical discharge weapon. The discharge from this weapon uses an arcing path towards the target, not unlike the path of a grenade through the air. Don't let the short range of this weapon fool you, however; it can be deadly to most unarmored aquanauts. Aside from a slight resistance to grenades, Deep Ones are one of the weakest aliens in the game. Interestingly enough, the Deep One—both living and deceased—is extremely valuable as a research subject (see Figure 6.26).

Figure 6.26. The Deep One Terrorist.

Gill Man

The Gill Men are the most common alien you'll encounter at the beginning of the game, and it is also the weakest of all alien races. Slow, poorly armored and with poor firing accuracy, Gill Men aren't much of a match to any experienced force of aquanauts. Granted, neophyte troopers may have their hands full when first facing these common aliens. Gill Man Commanders—found only in the largest terror sites, alien subs, and in some X-COM base attacks—do have the ability to use molecular control during combat. The rank and file Gill Man soldier may not be much to fear, but higher ranking Gill Men have higher firing accuracies, more TUs and seem to carry better weapons than their subordinates (see Figure 6.27).

Figure 6.27. The Gill Man.

Hallucinoid Terrorist

The Hallucinoid appears as a giant, flying, oversized jellyfish. The Hallucinoid can only attack during hand-to-hand combat, lacking a ranged weapon of any sort. They normally have a high health rating, making them tough opponents to kill, requiring multiple shots from most weapons. Occupying four squares on the battlescape map, the Hallucinoid is easy to hit with ranged weapons. Grenades aren't particularly effective against them, but just about any other type of weapon attack works well. Hallucinoids are usually encountered during alien colony and artifact site missions (see Figure 6.28).

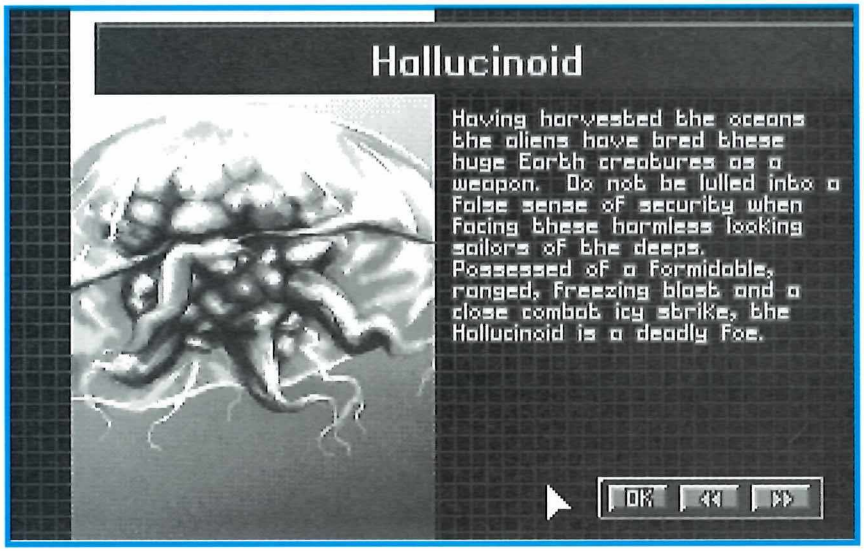


Figure 6.28. The Hallucinoid Terrorist.

Lobster Man

Sure to strike fear in the heart of any X-COM trooper, the Lobster Man is one of the most feared and deadly of all the alien races. In terms of sheer survivability, the Lobster Man wins hands down. Seemingly impervious to high-explosive (HE) damage from Sonic Pulsers, Grenades, and Disrupter Pulse Bombs, Lobster Men are also very resistant to gauss and other conventional weapons. Even the mighty Sonic Cannon has trouble taking down these armored killers, which usually require 2-3 well placed cannon shots to fall. They also have a fearsome hand-to-hand attack, making them deadly in close quarters (see Figure 6.29).

Yet while Lobster Men may seem nearly invincible, they do have a few glaring weaknesses. They are especially vulnerable to hand-to-hand weapons like the Vibro Blade and the Thermic Lance. Just one hit from a Thermic Lance will usually put an end to any Lobster Man, regardless of rank. Although Thermal Tazers don't work too well against them, Lobster Men almost always succumb to a single blast from a Thermal Shok Launcher. Finally, Lobster Men seem to be more vulnerable to fire-based (phosphorous) weapons than other alien races.

Essentially immune to HE weapons, vulnerable to Vibro Blades, Thermic Lances, Thermal Tazers, and also Thermal Shok Bomb/Launcher.

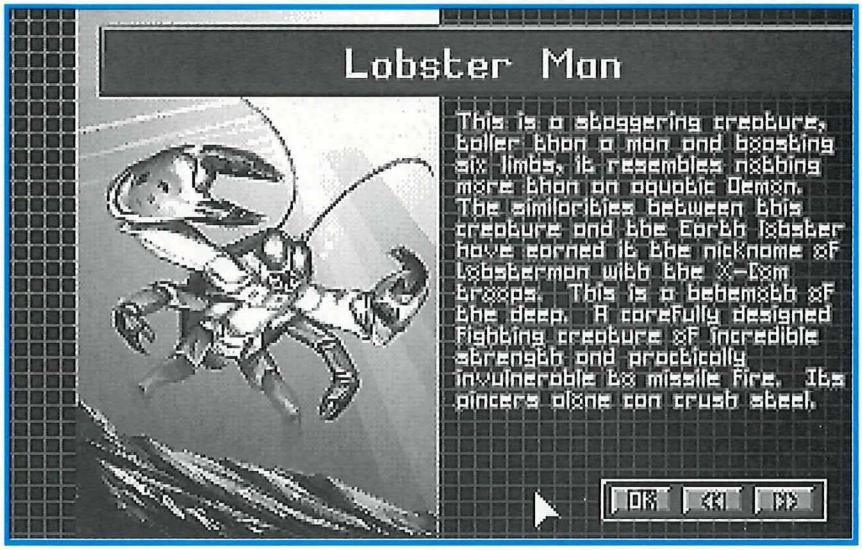


Figure 6.29. The Lobster Man.

Tasoth

The Tasoth—looking much like underwater lizard men—are a deadly and experienced foe. They are resistant to attacks by high-explosive weapons, and Tasoth Squad Leaders are skilled in the arts of molecular control combat. Even the lowliest Tasoth trooper has health and energy scores as high as a Lobster Man Commander. For all of these reasons, you should be extremely careful when facing these opponents. However, two strategies can be especially useful against them. Although some Tasoth have the ability to use molecular control, they don't seem overly resistant to M.C. attacks from your own troopers using the M.C. disrupter. Secondly, Tasoth—for all their strengths—seem to be one of the most easily panicked races in the game. When fighting Tasoth, kill as many of them as quickly as possible. Many will begin to panic and go berserk after their morale drops below a certain level. Because panicked aliens rarely pick up the weapons they've dropped, you can then scour the battlefield, shooting all the unarmed Tasoth you encounter (see Figure 6.30).

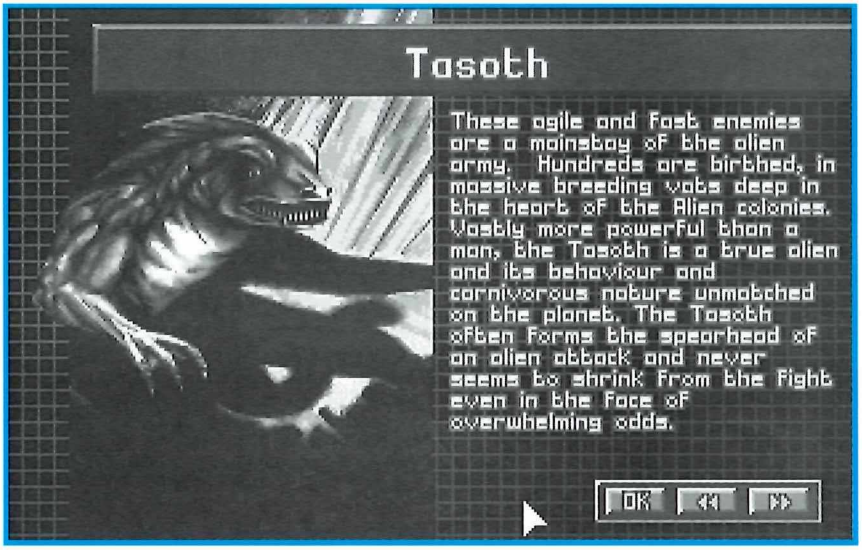


Figure 6.30. The Tasoth.

Tentaculat Terrorist

Arguably the most deadly alien you'll encounter in TFTD, the Tentaculat looks like a cross between a large squid and a human brain. Tentaculats don't have a ranged attack, but their close attack is a weapon to be feared. Instead of inflicting damage on an X-COM trooper, the touch of a Tentaculat turns the victim into a drooling zombie under alien control! Tentaculats have extraordinary amounts of TUs, allowing them to dash out from their hiding places, attack your soldiers, and then return to cover, all in one turn. Tentaculats can fly, and they are also very resistant to molecular control, making them next to impossible to control with an M.C. disrupter attack. The best strategy against these monstrosities of the deep is to leave all of your soldiers with plenty of TU points at the end of each turn, allowing them to hopefully fire at and kill any nearby Tentaculats before they are killed themselves. SWS platforms are especially useful against Tentaculats (particularly the Displacer/Sonic) because they are immune to their zombie-creating touch. If Tentaculats are at ground level, high-explosives and grenades will work well against them (see Figure 6.31).

Tentaculat Zombie

Created when a Tentaculat successfully attacks an X-COM trooper, the Tentaculat zombie has a close-combat attack which can turn an X-COM trooper into another zombie. When these zombies are killed, a full-grown Tentaculat will erupt from the corpse.

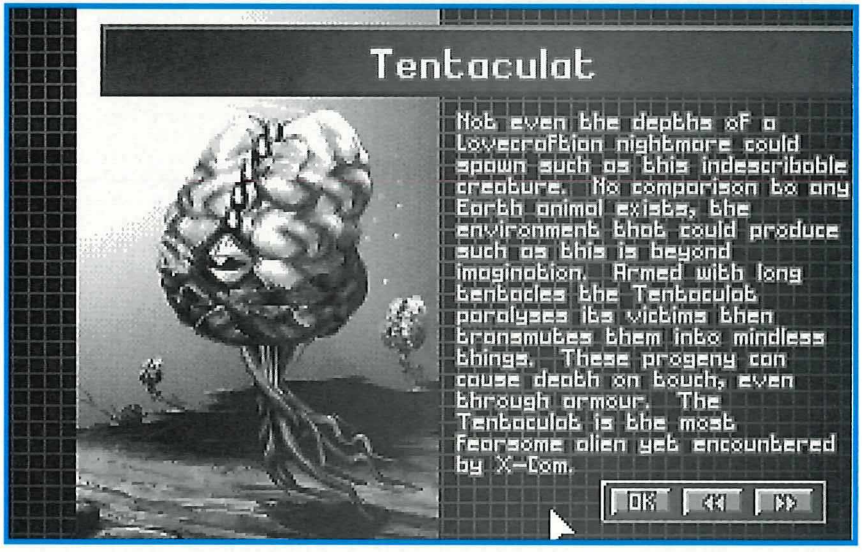


Figure 6.31. The Tentaculat Terrorist.

Triscene Terrorist

In terms of raw physical power, the Triscene is the king of the alien heap. Appearing much like a miniature Tyrannosaurus Rex with a series of weapons strapped to its back, the Triscene is normally only encountered during terror site missions. The Triscene is very heavily armored, making it very hard to kill with most ranged weapons, including Sonic Cannons. It also has a deadly close range biting attack. The biggest weakness of this beast is it's very weak under armor. Using Sonic Pulsers or high explosives—thrown directly under the Triscene—usually works very well (see Figure 6.32).

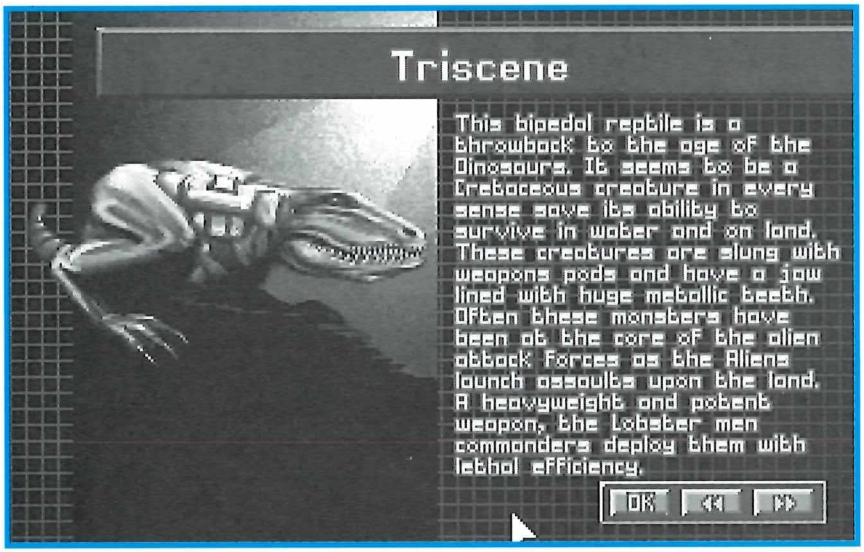


Figure 6.32. The Triscene Terrorist.

Xarquid Terrorist

The Xarquid is a deep-sea mutant, a horribly mutated shellfish that the aliens have genetically engineered to assist them during combat. The Xarquid possesses both long-range and close-quarters attack capability, making it a threat at all distances. The Xarquid's tough outer shell protects it from most weapon attacks, making it second only to the Triscene in terms of defensive armor strength. Fortunately, the Xarquid has the same weak under armor that the Triscene does, making it susceptible to grenades and explosives planted underneath it (see Figure 6.33).

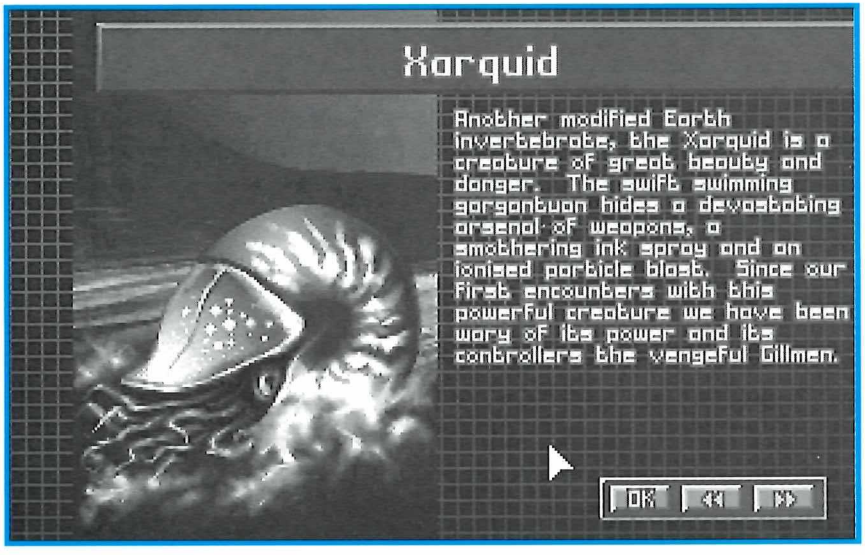


Figure 6.33. The Xarquid Terrorist.

Table 6.7. Alien Ability Score Summary—Beginner Difficulty Level.

Alien Type	Time Unit	En Acc.	Hlth Acc.	Reac Strn	Frng Skil	Thrw
Aquatoid Commander	54	100	35	63	21	58
Aquatoid Medic	54	90	35	63	21	58
Aquatoid Navigator	54	100	35	63	21	58
Aquatoid Soldier	54	90	30	63	21	58
Aquatoid Squad Leader	54	90	35	63	20	58
Aquatoid Technician	54	90	35	63	52	58
Gill Man Commander	50	80	60	53	28	65
Gill Man Soldier	40	80	45	45	18	50
Gill Man Squad Leader	45	80	50	45	19	54
Gill Man Technician	45	80	55	50	21	58
Lobster Man Commander	76	100	125	80	21	62
Lobster Man Navigator	74	95	120	75	21	62
Lobster Man Soldier	56	90	90	60	21	62
Lobster Man Squad Leader	66	90	110	65	21	62
Lobster Man Technician	70	95	115	70	21	62
Tasoth Soldier	56	100	125	80	21	62
Tasoth Squad Leader	66	100	135	80	26	62
Bio-Drone	80	120	140	40	36	0
Calcinite	68	96	55	75	29	80
Deep One	50	90	35	55	20	58
Hallucinoid	62	90	120	90	32	0
Tentaculat	99	140	96	90	20	50
Triscene	72	90	158	69	32	0
Xarquid	40	80	114	50	26	0
Civilian	35	65	30	30	30	50

Str	MC	MC	Armor				
			Frnt	Left	Right	Back	Undr
40	50	50	1	1	1	0	0
35	35	0	1	1	0	0	0
40	45	30	1	1	1	0	0
30	30	0	1	1	1	0	0
30	30	0	1	1	1	0	0
30	40	25	1	1	1	0	0
52	40	50	6	4	4	5	4
47	20	0	6	4	4	5	4
47	25	0	6	4	4	5	4
50	25	0	6	4	4	5	4
70	50	0	9	9	9	8	4
70	45	0	8	8	8	7	4
70	25	0	8	8	8	6	4
70	30	0	8	8	8	6	4
70	35	0	8	8	8	7	4
70	30	0	8	8	8	8	4
70	50	40	8	8	8	8	4
120	90	0	10	6	6	4	2
110	90	0	14	14	14	14	4
40	40	0	3	2	2	1	4
90	60	0	14	14	14	14	10
100	100	0	18	10	10	6	2
120	60	0	48	44	44	44	3
70	80	0	20	20	20	20	2
20	0	0	0	0	0	0	0

Molecular Control Combat

You may encounter aliens using molecular control to attack your soldiers. Molecular control requires much more analysis and description than we have room for here, so turn to Chapter 10, "Molecular Control," for more details.

Morale

As combat unfolds, chances are good that a few of your aquanauts may be injured or killed. As your aquanauts and SWS platforms are eliminated, the morale of your surviving soldiers will decrease. If morale falls far enough, some of your soldiers may freeze or run away in panic or go berserk, firing at anything within range. To minimize the effects of combat losses on morale, use aquanauts with only the highest bravery scores. Having a high-ranking officer on the battlefield will also help bolster the morale of troops on the battlefield. For more information on soldiers and morale, see Chapter 5, "Aquanauts."

Ending the Mission

A combat mission is normally completed when one of the three following events occurs:

1. All of the aliens on the battlescape have been killed or knocked unconscious.
2. All of your aquanauts and SWS platforms have been killed or knocked unconscious.
3. The mission is aborted.

If the mission is aborted, only the aquanauts present in the exit area (normally the transport) will be evacuated from the combat site. All the soldiers and SWS platforms outside of the transport when the mission is aborted will be considered "missing in action" and will never be heard from again. For the aforementioned reason, only abort a mission as a last resort!

The Aftermath

After the battle has been won, it's time to gather your forces, lick your wounds, and head back to base. There are a few points to consider at the end of each mission; these considerations are listed below.

Loot

Table 6.8. Knowing When to Keep Your Equipment.

Combat Mission	Keep Equipment?
USO Crash/Landing Sites	Yes
Terror Sites	No*
Artifact Sites	No**
Alien Colonies	No***
T'Leth	N/A

** Ship terror sites, alien colonies, and artifact sites are two-stage missions. After completing the first stage of these missions, the only weapons and equipment that your aquanauts take to the second stage will be the items that they actually carry with them. The only way to retrieve all the equipment, weapons, and other goodies from artifact sites and alien colonies is to kill all of the aliens found in both stages.*

Casualties of War

Soldiers wounded during combat will be kept out of action for a length of time directly proportional to the severity of their wounds. Soldiers killed in action are permanently removed from play, and any armor that they were wearing at the time of their death is considered permanently lost. However, the equipment from killed and unconscious soldiers is normally recovered if all the aliens at the combat site have been killed.

If any aliens were unconscious at the end of the battle, they'll be loaded onto the transport and taken back to the base for study. If you don't have an alien containment facility at the base from which the transport originated, any captured aliens will die en route to the base. Casualties of war are placed into the following groups:

- Wounded soldiers
- Killed soldiers
- Dead or unconscious aliens
- Civilians

Mission Scoring

After the mission ends, you'll be given a numerical score for how well you did during the mission. Generally, killing and/or capturing all the aliens at the combat site while suffering the fewest possible casualties of your own (e.g., aquanauts, SWS platforms, and civilians killed or wounded) will give you the highest score. If you do poorly, you may be given a negative score—even if you managed to kill all the aliens on the battlescape!

7

Downed and Landed USOs, Terror Sites

In this chapter, we examine the two most common tactical combat situations you'll face as an X-COM commander: downed/landed USOs and alien terror sites. Although both types of missions involve using your soldiers in tactical combat with the enemy, they both require slightly different strategies.

The general tactics outlined in Chapter 6, "Tactical Combat" apply to both of these mission types. If you haven't yet read Chapter 6, you might want to do so before continuing any further. This chapter builds upon some of the information presented in Chapter 6, so having a working knowledge of that information will help you get the most out of this chapter.

Downed and Landed USOs

Landed USOs can appear on the Geoscape screen at any time, appearing as small green "X"s. USOs are downed only after an X-COM craft has successfully engaged and shot down an enemy USO. When this occurs, the crash site is marked by a white "X." For more information on the detection and interception of USOs, see Chapter 4, "Detecting and Intercepting USOs".

Before you send out a transport loaded with troopers to any combat site, you should have an idea of the number of aliens you'll be facing. Table 7.1 provides an estimated number of aliens you can expect to encounter at a USO landing site.

Table 7.1. Estimated Number of Aliens in Landed USOs.

USO	# Crew	Size
Survey	1	Very small
Escort	2–6*	Small
Cruiser	6–13*	Small
Heavy Cruiser	8–11*	Medium
Hunter	10–15*	Medium
Fleet Supply	11–20*	Large
Battleship	15–22*	Large
Dreadnought	15–22*	Very large

**Estimates*

Note: Downed USOs usually have about 20% fewer aliens than the figure listed above, because some may have been killed when the sub was downed.

For more information on equipping your transport and arming your soldiers, see Chapter 6, "Tactical Combat."

Deployment: USO Crash Sites and Landed USOs

As soon as you arrive at the USO site and equip your soldiers, you're ready to enter the battlefield. As mentioned in Chapter 6, deployment from the transport can be one of the most dangerous activities your soldiers can undertake in combat. In addition to the general deployment tactics mentioned in Chapter 6, you must understand the techniques for deploying your troops specifically for a USO site.

Establish a Perimeter

After checking the overhead map and peeking out the doors of your transport, you should start to deploy your forces. In the first phase of the deployment process, you should move one soldier out and to the left of the transport, and a second out and to the right (see Figure 7.1). Be sure to leave both soldiers enough TUs to kneel and fire at least one snap shot. Then end the turn.

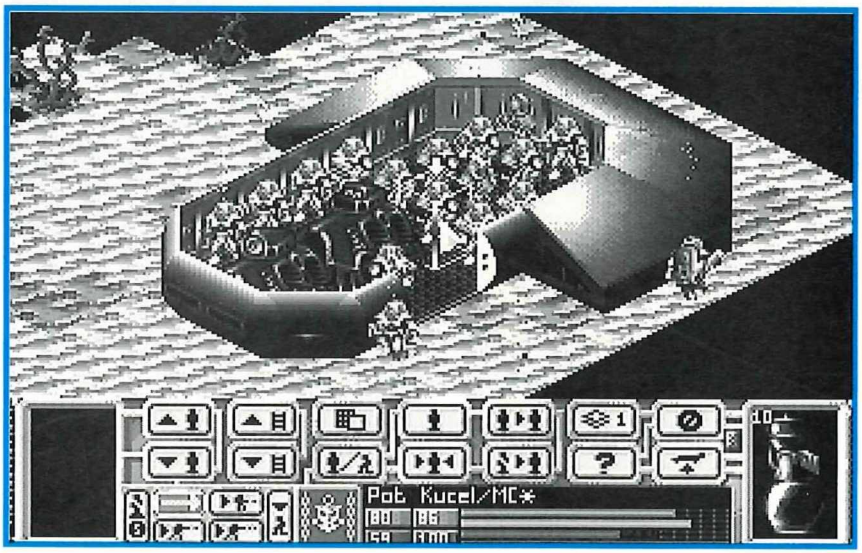


Figure 7.1. The first phase of establishing a perimeter.

Note For the purpose of these examples, the pictured aquanauts are standing a bit too close to one another than they should be in an actual combat mission. Remember to keep soldiers at least 7 to 8 spaces apart to minimize the effects of alien grenades.

On your next turn, advance the two soldiers currently outside around the edges of the transport, and then move out two more soldiers to occupy the spaces the other soldiers just vacated (see Figure 7.2). End your turn.

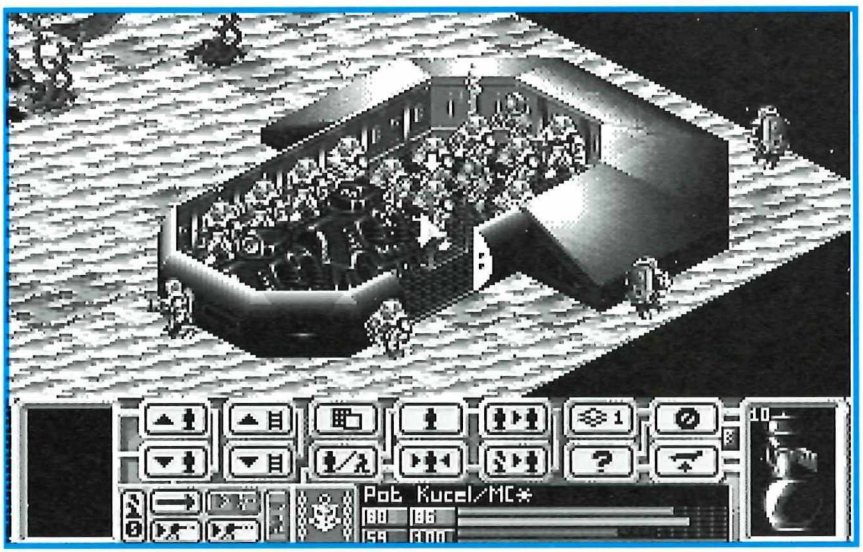


Figure 7.2. The second phase of establishing a perimeter.

On the third turn of your deployment, advance the first two soldiers around the blind side of the transport, move the next pair to occupy the spaces vacated by the first two, and then move a third pair of troopers out of the transport. If you have a soldier equipped with Magnetic Ion armor, make him fly up one level and walk onto the top of the transport (see Figure 7.3). You should now have at least six aquanauts dispersed in a defensive perimeter around your transport. Ideally, each soldier should be facing a different direction, thereby maximizing the chances that you'll spot any alien lurking nearby.

Figure 7.3. The third phase of establishing a perimeter.

Now that your defensive perimeter is established, you should immediately look for the nearest map edge or corner. Your transport usually lands fairly close to the outer limits of the map. Your next objective should be to thoroughly search the area between your transport and the nearest map edge, in a process we'll call "securing the flanks."

Securing the Flanks

Nothing is worse than being attacked by two separate groups of aliens at once, catching your squad in a deadly cross fire. To prevent this incident from occurring, you should immediately explore the terrain between your transport and the nearest map boundary. You can start this process as the remainder of your troops are debarking from the transport.

After you've secured your flanks, you can begin moving your aquanauts toward the suspected location of the alien sub. Ideally, you should be able to spot the alien sub with a combination of using the overhead map and the sighting ability of your soldiers. When you've decided in which direction the sub lies, you can begin advancing toward your objective.

Advancing Toward the Objective

As shown in Figure 7.4, you should advance toward your objective using any nearby terrain to screen your advance. What type of formation you use depends largely on how many soldiers you have and whether or not you know the location of the USO. If you have a large number of aquanauts, you can string them all out in an in-line formation with a scout or SWS platform acting as point. When you spot the alien sub, you can immediately begin moving towards it.

However, if you don't have very many soldiers (less than 10, for example), you may try a combination of formations. In the example shown in Figure 7.4, you might possibly use a total of three fire teams: a central group in wedge formation (with 4–6 soldiers), and two teams of 2–3 soldiers (in loose formation) off to either flank of the main group. Feel free to experiment and use any combination of formations you wish. For more information on aquanaut movement formations and fire teams, see Chapter 6, "Tactical Combat."

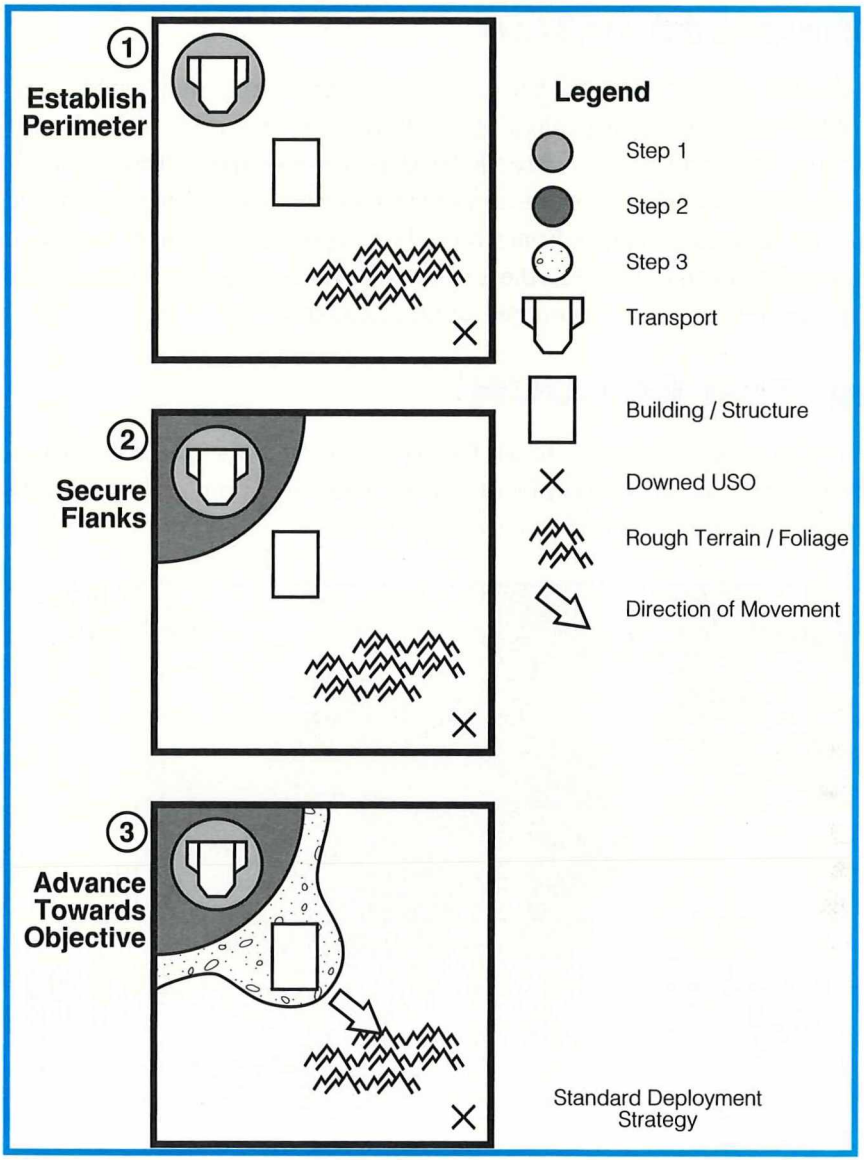


Figure 7.4. A diagram visually illustrating the three steps listed previously.

Buildings and Terrain

As you advance across the battlescape toward your objective, you invariably encounter a variety of terrain types and structures. Most natural terrain is in the form of coral reefs, rocky outcroppings, and mounds of sand. Regardless of the type of terrain, you should keep your soldiers shielded by the terrain as much as possible during your advance. The structures you face vary, ranging from wrecked sailing ships to downed aircraft, and even ancient Atlantean ruins. Regardless of the structures present, you should thoroughly search every structure you encounter for hidden aliens.

Things That Go BOOM!

There are some objects scattered across the ocean floor that have a tendency to explode when fired upon. Most of these exploding objects take the form of piping or ductwork scattered throughout the combat area (see Figure 7.5).

Figure 7.5. Terrain that explodes when fired upon.

If an alien is hiding behind a structure, you're in luck: simply fire at the structure and it should explode, taking the alien out along with it. To avoid the same thing happening to your troops, give the structures a wide berth of at least eight spaces. Anything less could mean that your soldier gets nailed in the explosion if an alien has the foresight to lob a grenade or take a potshot at the structure.

When struck, the exploding structures seem to generally explode with the same destructive force of the object that struck them. In other words, hitting an explosive structure of pipes with a Sonic Pulser causes the object to explode with the equivalent explosive strength of another Sonic Pulser! Some of these structures—particularly the one shown in Figure 7.5—explode several times when struck.

Entering the USO

Although you'll find aliens outside of the USO (you'll usually find more aliens outside than inside the USO if it was shot down), your biggest challenge is searching and destroying the aliens within the confines of their own vessels. (See the USO maps in this section.) The smallest USOs don't require too much tactical planning—you must send someone inside the USO to shoot the remaining aliens. In larger USOs, however, you face a much more challenging combat environment.

Part of your strategy depends on your mission goals. Are you out to capture the sub intact, or do you want to kill all of the aliens as quickly as possible? If you're on a recovery mission (to bolster your supply of aqua plastics or Zrbite, for example) you'll want to refrain from using grenades and other explosive weapons that could damage the contents of the sub. If you're just out to kill all the aliens as quickly as possible, feel free to blow up everything in sight!

Before entering the sub, you should ideally surround the sub with as many soldiers as possible (see Figure 7.6). It's a good idea to enter the sub from more than one direction, because marching all your soldiers *en masse* through the front door of an alien sub usually results in a good portion of your soldiers getting blasted. Most subs that have been shot down by your interceptors usually have an open section of hull somewhere other than the main door. The tell-tale signs of a hull-breach are lots of smoke and bubbles near the damaged area. If you can't find a hole in the sub, you can create your own with a Disrupter Pulse Launcher and/or a few Sonic Pulsers to open up a small gap in the hull of any sub. If you can, advance your soldiers into the sub—from two or more access points on the sub—in the same turn.

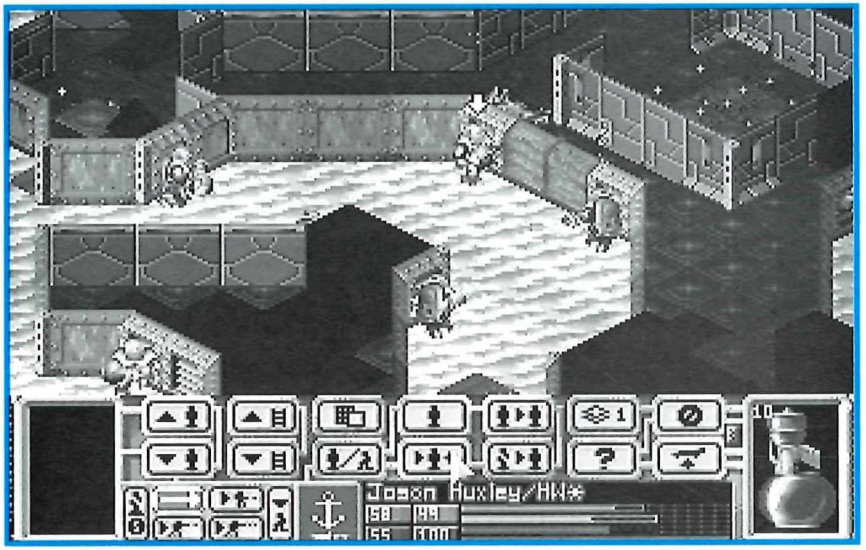
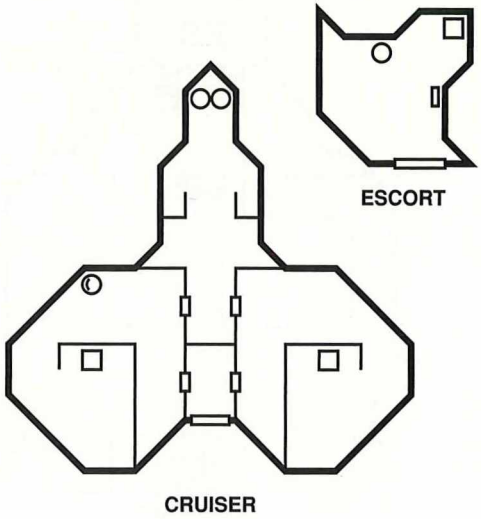
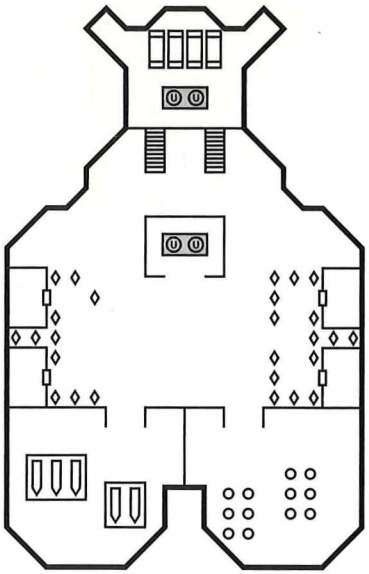


Figure 7.6. Aquanauts preparing to enter an alien submarine.

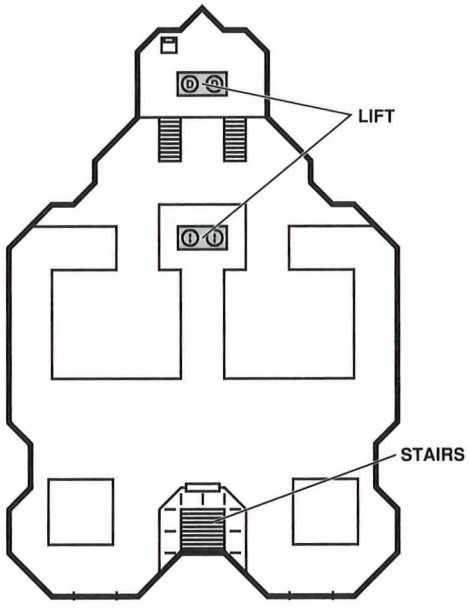
If your soldiers are wearing Magnetic Ion Armor, make them fly above the sub and look for holes or doors on the upper levels of the sub. Some alien submarines even have entryways on the roof! If you can't find any holes on the roof, use a Disrupter Pulse Launcher to create a few. After the hole opens up, drop your soldiers down into the sub from above.



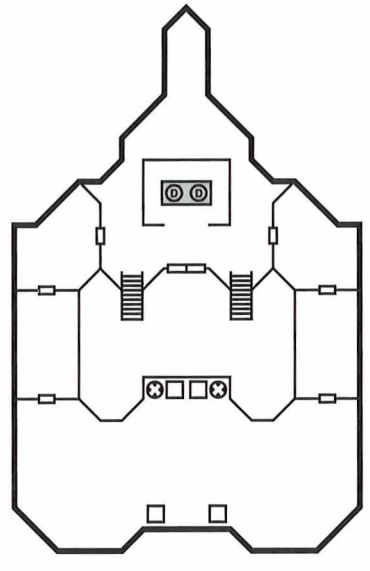
ESCORT, SURVEY -XCOM2
CRUISER



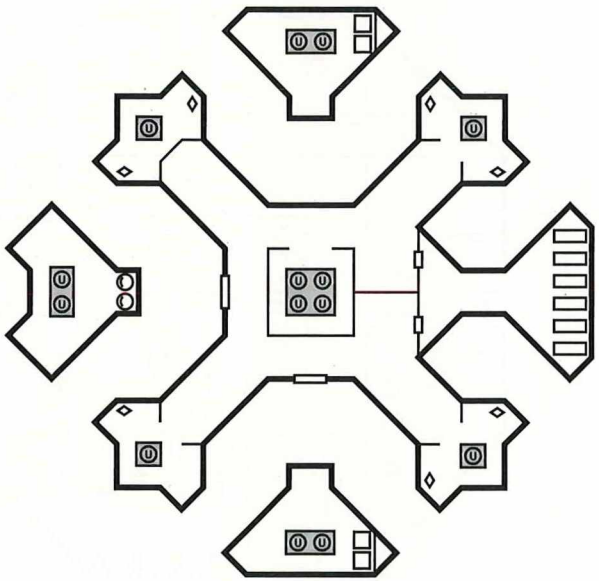
FLEET SUPPLY (LEVEL 0)
SIZE: LARGE ALIEN: LOBSTER MAN



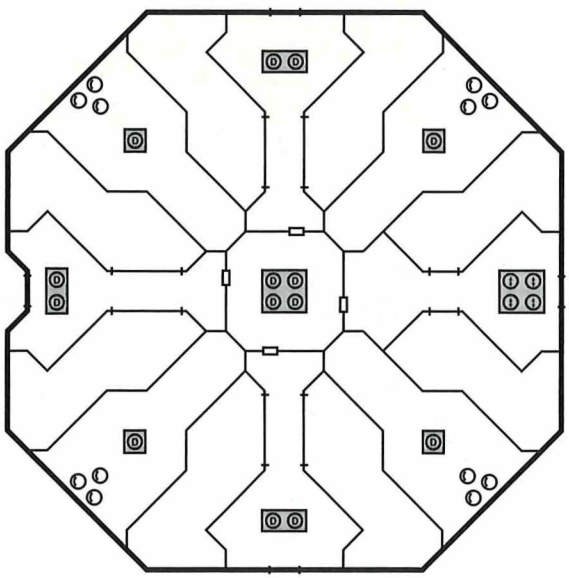
FLEET SUPPLY SHIP (LEVEL 1)



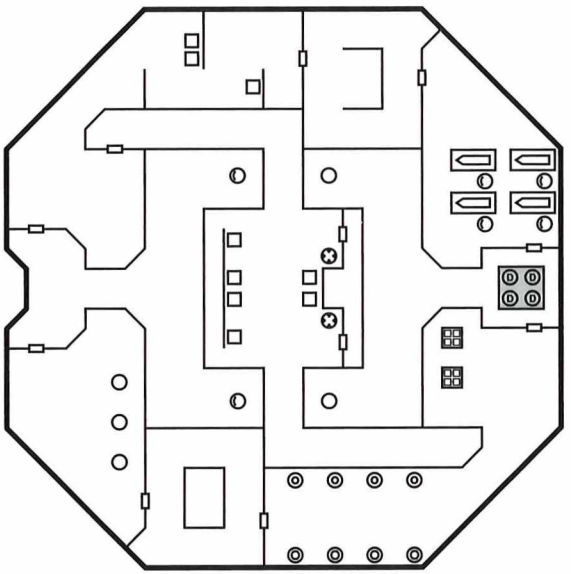
FLEET SUPPLY SHIP (LEVEL 2)



DREADNOUGHT (LEVEL 0)



DREADNOUGHT (LEVEL 1)



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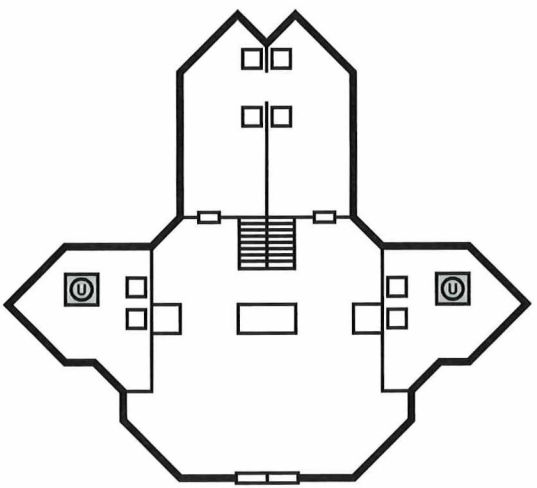
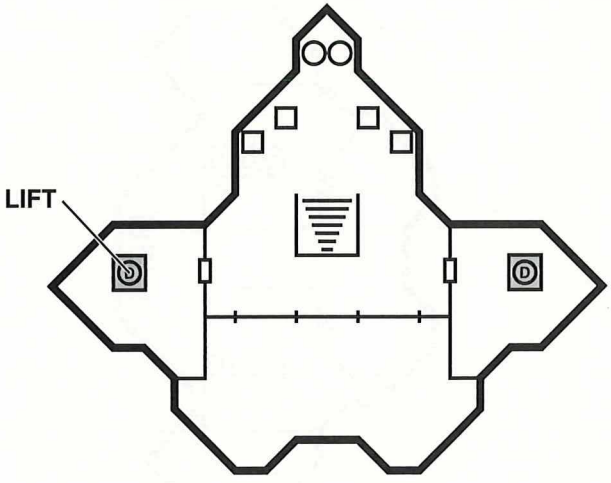
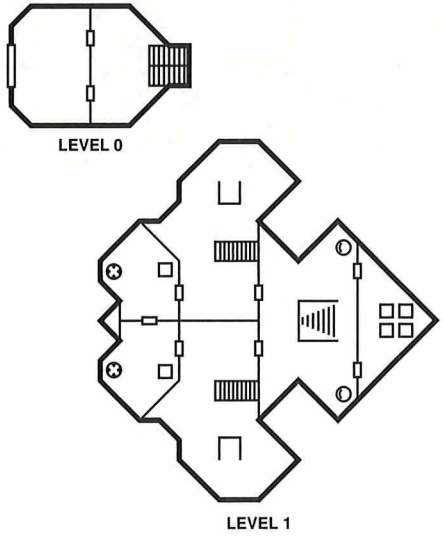


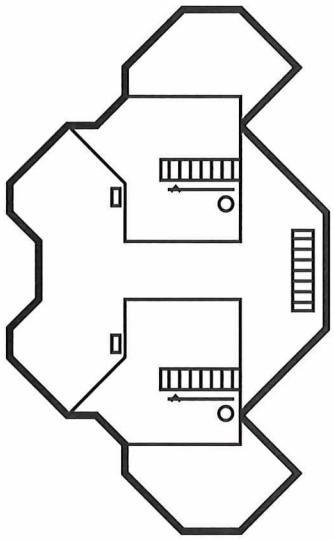
HEAVY CRUISER (LEVEL 0)



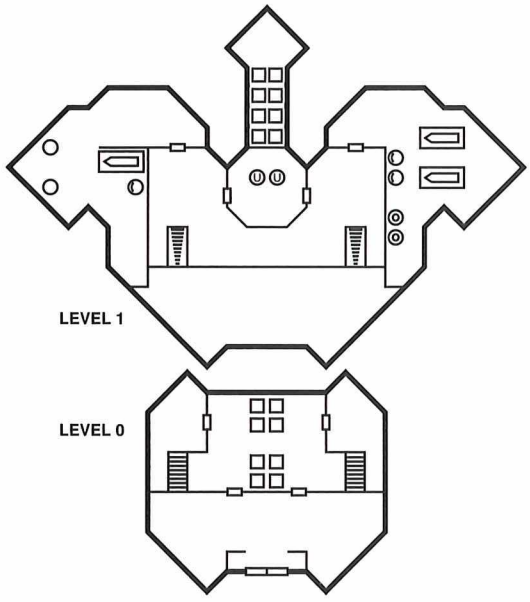
HEAVY CRUISER (LEVEL 1)



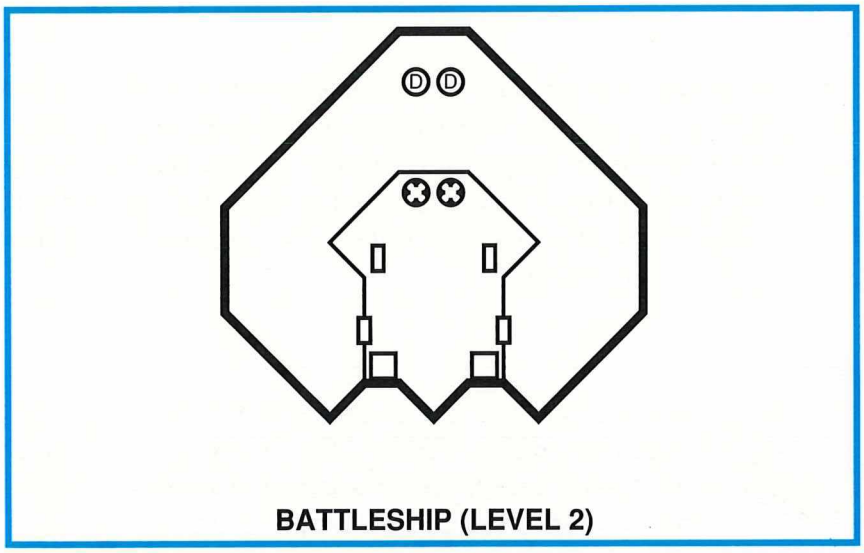
HUNTER (LEVEL 0 & 1)
SIZE: MEDIUM



HUNTER (LEVEL 2)



BATTLESHIP (LEVEL 0 & 1)



BATTLESHIP (LEVEL 2)

After you enter the alien sub, your soldiers should immediately switch over to small fire teams of 2–3 soldiers each. A formation isn't really that important, as long as you move the soldiers in groups and have them look out for one another. Begin a systematic search of the vessel, using most of your soldiers to scour the contents of an alien vessel. Larger subs are especially dangerous because of numerous balconies, gangways, and hidden alcoves that can hide aliens.

Using grenades in such cramped quarters can be a bit risky, so you may want to rely on soldiers with rifles and hand-to-hand weapons to do most of your dirty work. If you're unsure of whether there are any aliens lurking outside of the sub, you are well advised to leave a pair of soldiers to guard your escape. After you have hunted down and killed all the aliens, the mission ends.

Terror Sites

Perhaps the most feared of all alien surface attacks, the terror site is specifically aimed at demoralizing the civilian population. If the citizens of a nation are repeatedly terrorized by the aliens, the chances are much greater that their government—under pressure from the frightened populace—will sign a pact with the aliens.

Ignoring a terror site can have a devastating impact on your bottom line, because the countries in which the terror site occurred almost always decrease their funding of X-COM due to your inactivity. As great as the risks are for entering a terror site, the rewards are equally as great. Most of the aliens needed for special research projects (such as Deep Ones and Calcinites) can normally only be found during terror site missions.

Overview

A terror site is much like a USO site, but with three main distinctions. First, all terror sites occur above-water on islands, in shipping ports, cruise liners, or cargo ships. Secondly, all terror sites include civilian non-combatants that the aliens are trying to kill and that X-COM is trying to protect. Finally, there is no alien craft to find and enter—all the aliens are scattered freely about the battlescape, forcing you to diligently search all corners of the battlescape to find them.

Normally, terror sites vanish from the Geoscape screen in less than a day, which makes a hasty response by your assault team vital to success. However, there is a way to keep a terror site available on the Geoscape map indefinitely.

Terror sites will not disappear if they are targeted by an X-COM transport or interceptor. Send an unarmed and unequipped Triton to the terror site. When it reaches the location of the terror site, it will immediately turn around and head back to base. Right before it does so, launch another craft and again target the terror site. As long as you have enough craft to keep the terror site targeted by at least one craft at all times, you can keep the terror site on the Geoscape map for days on end. This is perfect if you're running low on soldiers when the terror site first appeared, giving you time to purchase more equipment and recruit more soldiers to take care of the terror site.

If you don't have enough soldiers to tackle a terror site, you have yet another option. Load your transport with one (1) soldier and send the transport to the terror site. As soon as the transport touches down and the combat begins, abort the mission. You'll still lose a few hundred points, but nowhere near as many as you would have lost if you ignored the terror site entirely by not sending a transport. The same strategy can also work for artifact site missions (see Chapter 9).

Saving Civilians

As mentioned previously, one of your goals on terror site missions is to save as many civilians as possible. Unfortunately, keeping the dull-witted, slow-moving, and unarmed civilians in TFTD out of harm's way is easier said than done. To minimize the risk to any civilians in the area, you should refrain from using grenades and other area effect weapons unless you are sure that no civilians will be affected by the blast. Instead rely on soldiers with high firing accuracy to eliminate aliens with pinpoint shooting precision.

Terror Site Deployment

Almost all terror sites benefit from using the same deployment methods outlined earlier in the chapter for searching USO crash and landing sites.

General Terror Site Tips and Tactics

Here are a few specific tips and tactics that are applicable to all terror site missions.

Attack Only in the Daytime

Using a trick described earlier in this chapter, you can use your interceptors and transports to keep a terror site on the Geoscape screen indefinitely. Use this tip to your advantage by keeping the terror site active longer than normal, which allows you to enter combat at a time of your own choosing—in the daytime. Terror missions fought at night are very difficult and you should avoid them if at all possible.

Save the Civilians

Keep an eye out for the civvies—they have the bothersome tendency to position themselves right between your soldiers and the aliens during a firefight. Aliens tend to ignore civilians that are unconscious, so carry around a Thermal Tazer or a Thermal Shok Launcher to zap all the civilians you find. The aliens ignore them and you are given credit for saving them at the end of the mission.

Easy on the Explosives

High explosives such as Sonic Pulsers and HE ammunition have the tendency to damage creatures and objects within a certain range. Chucking a Sonic Pulser toward a Deep One may quickly end his viability as a legitimate threat to your forces, but it also blows away the half-dozen civilians standing next to him as well. You receive a big negative point bonus for killing civilians, so use grenades and other area effect weapons only when you're sure there are no civilians nearby.

Speed Is Key

While you're busy hunting down the aliens, the aliens are busy hunting down the civilians. Although you should still move your soldiers with care, a bit more haste is recommended. If you wait too long to hunt down all the aliens in the area, you won't have any civilians left to protect.

Take to the Skies

In port and island terror site missions, the Displacer/Sonic SWS platform can be an invaluable asset. Unlike the Coelacanth tanks, the Displacer can fly, which allows it to scout above, behind, and around any terrain or structures in the area. The Displacer also has more TUs than most soldiers, allowing it to cover vast amounts of terrain and find civilian-killing aliens quickly.

However, any SWS platform is a liability in a ship terror site, because they are simply too large to fit through most doorways and passageways on any ship. The moral? Always take at least one Displacer/Sonic on every port and island terror site mission you go on, but leave them behind on ship terror site missions!

Head for Cover

Terror sites do have one advantage over other combat areas: lots of structures and terrain to hide behind. Your soldiers should never be exposed to open view—keep them close to walls, inside buildings, and next to any type of terrain.

Functional Formations

One of the best formations for terror site missions is the in-line formation. It always helps if you take along as many soldiers as possible on terror site missions, a tactic that works well with this formation. The following strategy works well: First, anchor one end of the formation to a defensible structure (such as a building with a few X-COM snipers peeking out of the windows), and then pivot across the battlescape in a broad, sweeping movement, much like a windshield wiper sweeping across a muddy window.

Port Terror Site

Arguably the easiest of all the terror sites, the port terror site is still no walk in the alien-infested park (see Figure 7.7). Aliens have plenty of places to hide, and the maze of fences, sheds, dumpsters, and warehouses can make hunting down aliens a real chore.

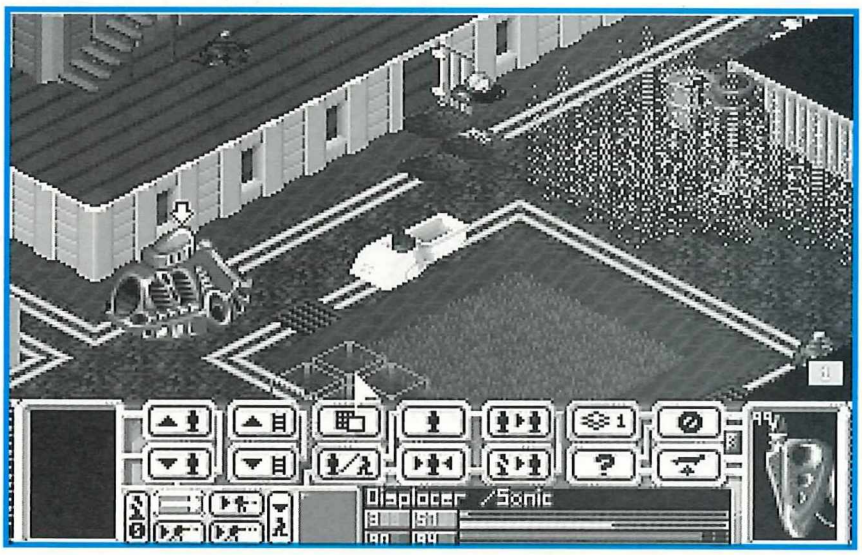


Figure 7.7. Port terror site.

Legend
Chair w/ Desk
File Cabinet
Door
Door's Open Arc
Window
Chain-Link Fence
Explosive Drum
Telephone
Platform Support or Scaffolding
Pile of Trash
Pile of Tires
Crate
Stairs Up
Stairs Down
Water
Forklift (Explosive)
Gate House
Platform Level 1
Warehouse Level 1
Dock
Triton Landing Area
Dumpster
Dumpster
Platform Area
Warehouse Level 0
Dumpster
Office
Gate

Deployment

Refer to the deployment advice presented earlier in this chapter and in Chapter 6, "Tactical Combat."

Things That Go BOOM!

Just like the exploding pipeworks found at most USO sites, the port terror site has its own share of exploding goodies. Forklifts and oil barrels explode when hit, which allows you to blast any aliens nearby (see Figure 7.8). Just be sure that there are no civilians or aquanauts in the area before you blast the thing to pieces.

Figure 7.8. A forklift and a bunch of oil barrels at a port terror site.

Where the Aliens Hide

After scouring the battlescape for hours, you think you've found all the aliens—but you can't leave! Chances are that there are a few aliens still cowering somewhere in obscure locations. Although aliens can be found almost anywhere, they tend to congregate in the upper floors of warehouses and in the top levels of steel towers that dot the port landscape.

Ending the Mission

To complete your mission, you must find and kill all the aliens on the battlescape map.

Island Terror Site

Even the tropical resort beaches of Hawaii and the Bahamas aren't free from the clutches of the slimy aliens. In the island terror site mission, you're called upon to rid a tropical island of an infestation of alien invaders.

Figure 7.9. Aquanauts preparing to enter an alien submarine.

Deployment

Refer to the deployment advice presented earlier in this chapter and in Chapter 6, "Tactical Combat."

Things That Go BOOM!

On the island terror sites, kitchen stoves and wet bars are the most common explosive structures. Some aliens hide inside the buildings scattered across the island battlescape. Lure them next to a stove before tossing in a grenade to explode the stove and cook the alien in the process.

Where the Aliens Hide

Aliens in island terror sites can be found all over the map, but they tend to hide in the narrow passageways beneath the hills scattered throughout the battlescape (see Figure 7.10). They also tend to lurk near the Easter Island-like statues usually present on one end of the map, and they are often found on the second and third levels of buildings in the area.

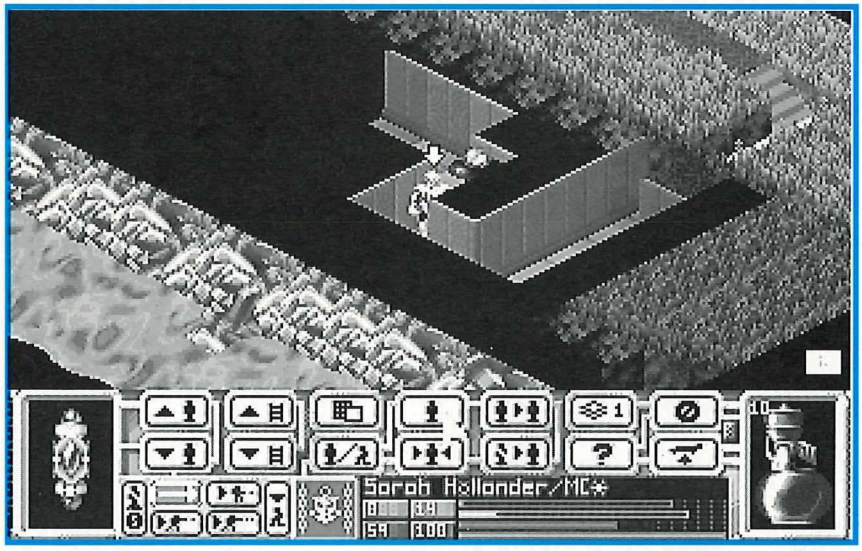


Figure 7.10. A trooper exploring a subterranean passageway at an island terror site runs into a Bio-Drone.

Don't use molecular control on civilians! If you do, they may side with the aliens—and you must kill them to end the mission. For more information, see Chapter 10, "Molecular Control."

Ending the Mission

To end an island terror site, you must find and eliminate all the aliens on the battlescape.

Shipping Terror Site

Of all the terror sites, those which happen aboard cargo and luxury ships at sea are the most difficult (see Figure 7.11). Unlike port and island terror site missions, ship missions have the following two stages:

- Clearing the top decks of aliens
- Delving below deck and eliminating all the aliens in the second stage

Ship terror sites also feature very restrictive terrain, with twisty-turvy passageways and small, cramped rooms and corridors. Combine the restrictive surroundings with the long mission length, and the ship terror site is easily one of the most difficult missions available.

Figure 7.11. A ship terror site.

Shipping Terror Site Equipment Notes

Due to the nature of the ship floor plan, your aquanauts are forced to make their way through narrow passageways and numerous doors. This means that you can stumble upon an alien at any time. Because of this, hand-to-hand weapons take on a much greater role here. If you come face-to-face with a Lobster Man with anything less than a Sonic Cannon, you're likely to be killed. Even with a Sonic Cannon, it's unlikely that your brave trooper can kill the Lobster Man before he loses his own life. A perfect weapon in these crowded quarters is a hand-to-hand weapon such as the Thermic Lance or the Vibro Blade. Both of these weapons also work very well against Lobster Men.

Because of the cramped nature of the ship floor plan, SWS platforms are virtually useless. Unable to fit through single-width doorways, an SWS platform spends more time blasting a path for itself through the walls and bulkheads of the ship than it does actually engaging any enemies. This is particularly true on the second part of the ship mission, which features even more cramped quarters than the first stage. If you're going on a ship terror mission, leave the SWS platform at home and take four extra soldiers—you'll need them!

Because ships have two stages, you need to pack along as much extra ammunition and grenades as you can carry. When you kill all the aliens on the upper decks of the ship, you are immediately sent to the deployment area in the second stage of the terror site below decks. Unfortunately, the only weapons and ammunition you can take with you is what your aquanauts actually have on them—any other equipment and supplies left on deck are not carried over to the second stage.

Deployment

In the first stage, feel free to use the deployment advice presented earlier in this chapter and in Chapter 6, "Tactical Combat." The second stage, however, places your aquanauts in the belly of the cruise or cargo ship in a designated deployment area.

If you're fortunate enough to be fighting a ship terror site in the hold of a cargo ship, your deployment area becomes a wide open expanse of space in the cargo hold. If you're on a cruise ship, you'll appear in the cramped, cluttered forward hold of the cruise liner—with alien snipers hiding behind crates in front of you and leering at you through the wire-mesh floors of the second level. Also, be especially cautious of Bio-Drones in this stage. In this second example, plan on blasting your way out with lots of Sonic Pulsers and grenades.

Things That Go BOOM!

In the ship terror site, there are usually oil drums littered across the battlescape, especially if you're fighting in a cargo ship. The oil drums explode when hit, as do the ovens and other kitchen appliances in the ship's galley.

Where the Aliens Hide

Like all the other terror sites discussed here, aliens are usually found in every nook and cranny of the terror site. They do tend to hide out in certain areas though, such as in the kitchen and elevators in the first stage. They also tend to hide in the engine room in the second stage as well.

Ending the Mission

To end the mission, you must kill all the aliens on board the ship in both mission stages.

8

X-COM Bases and Alien Colonies

In this chapter we take a look at X-COM bases and Alien colonies.

X-COM Bases

In addition to fighting the aliens on far-off battlefields in port cities, cruise liners, and beneath the sea, sometimes the aliens *come looking for you.* If you've been particularly successful at shooting down alien submarines or knocking out alien colonies, the aliens may decide that you must go. They will send out a ship loaded with alien soldiers intent on invading and taking over your base.

How Do Aliens Find My Base?

Aliens search for your base using a number of methods. If you've been aggressively shooting down USOs in the vicinity of your base, the aliens will begin searching that area. The aliens will attack the X-COM bases in which they have taken a beating. For example, areas where large numbers of subs, colonies, and artifact sites have been destroyed.

To help keep your base hidden, you may want to intercept USOs at a distance from your base. Instead of attacking them immediately, enter stand-off mode (see Chapter 4) and patiently follow the enemy sub. When it travels far enough away from your base (for example, into another ocean territory), engage it and shoot it down. The aliens will then start looking in the wrong place for your base.

Base Defense Facilities

To protect your base from attack by aliens, there are a number of specific base facilities you can build. Table 8.1 provides a summary of all the base facilities that play a role in any base defense strategy. For more information on any of these facilities, refer to the UFOpedia located on the Geoscape button bar.

Table 8.1. X-COM Defense Facility Comparison.

Name	# Days	Construction Cost	Monthly Maint. Cost	Description
Bombard Shield	38	$1,200,000	$15,000/Mo	Doubles other defenses.
Gauss Defenses	24	$400,000	$10,000/Mo	Hit ratio: 60% DV: 600
M.C. Generator	33	$1,300,000	$5,000/Mo	Makes base harder to find.
PWT Defenses	34	$800,000	$14,000/Mo	Hit ratio: 80% DV: 1200
Sonic Defenses	34	$600,000	$12,000/Mo	Hit ratio: 70% DV: 900
Torpedo Defenses	16	$200,000	$5,000/Mo	Hit ratio: 50% DV: 500

How Much Base Defense Is Enough?

Ideally, your interceptors—serving as your first line of defense—should be able to intercept all of the alien subs bound for attack. If you have the transmission resolver, you can easily identify the ships that are coming to attack your bases, because they have a mission type of "floating base attack." For more information on intercepting alien subs and a description of their mission types, refer to Chapter 4, "Detecting and Intercepting USOs."

If an enemy sub does get through your interceptor patrols, it will then try to land outside your base and send soldiers in to attack the personnel of the base. If you have base defenses, you'll see the Base Defense screen appear as the alien sub draws near (see Figure 8.1). Base defenses generally don't become too useful until they have reached a combined defensive value of at least 2000. For example, a base with Sonic Defenses and P.W.T. Defenses would have a defensive value of 2100, based on the information contained in Table 8.1. If your base is being attacked by a small alien submarine, a lower base value will be needed to destroy the sub. Conversely, if your base is being attacked by an alien dreadnought, you'll need a defensive value of 2400 or higher. To maximize your defense efforts, replace all your base defenses with the most advanced base defense systems currently available. The bombardment shield can be especially useful in all base defense actions, because it gives your base defenses the ability to fire twice instead of just once at the attacking alien subs.

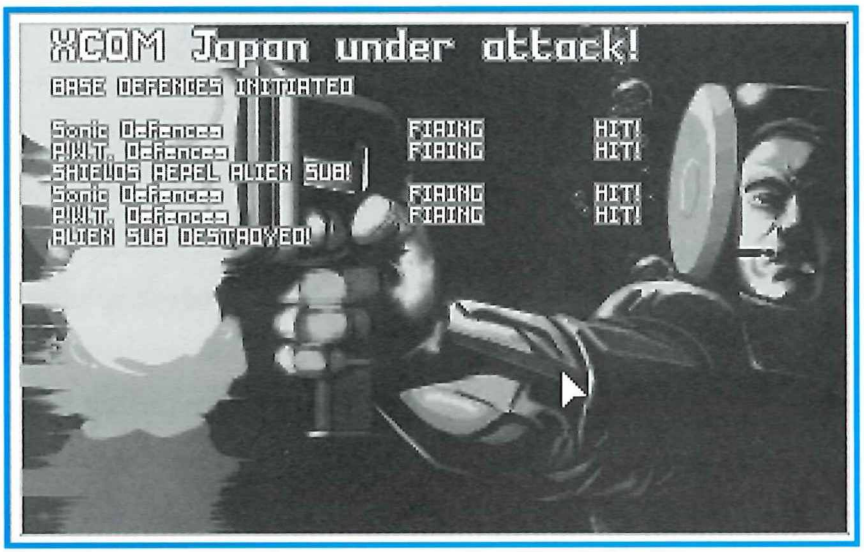


Figure 8.1. Base defenses destroying an attacking alien sub.

In Figure 8.1, the base defenses have managed to hit and destroy the alien sub before it could reach the base. If this occurs, the base defense action ends and the game returns to the Geoscape screen. If you don't have any base defenses or your defense was unable to shoot the sub down, you'll see the Base Defense Briefing screen, as shown in Figure 8.2.

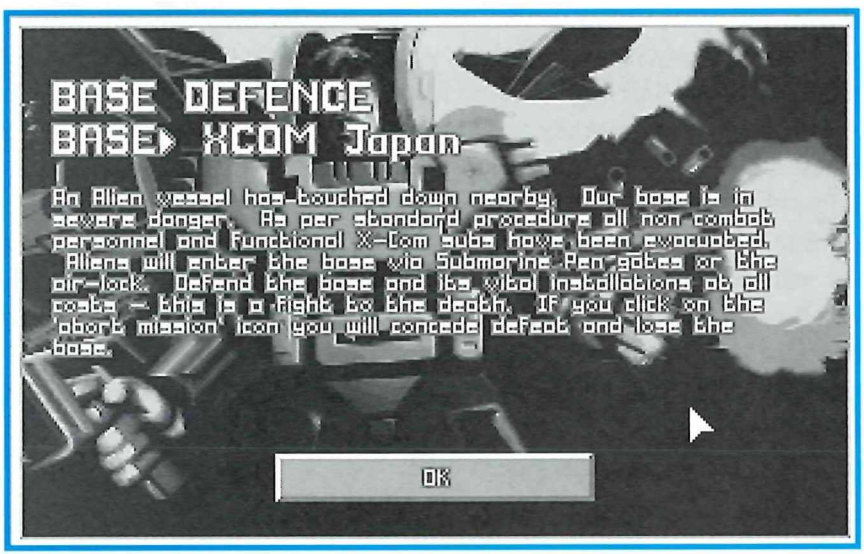


Figure 8.2. Alien troops have entered your base!

Equipping Your Aquanauts

Much like any other tactical combat segment, you get the chance to outfit your soldiers before combat. Vital to the effective preparation of your base to defend against an alien attack is a firm understanding of the 80-item equipment list.

The 80-Item List

Just as the transport limits you to 80 items of equipment, the only equipment available to you is the first 80 items out of your base stores. When providing you with those items of equipment, the computer goes down the equipment list, and assigns you weapons and equipment out of base stores exactly as listed. This means that it if you have too many Dart Guns, Harpoon Jet Rifles, and other weak weapons clogging up your base inventory, you're likely to be assigned those weapons even before you can use any of your better weapons.

To eliminate this problem, always keep your base stores as trim and efficient as possible. As soon as you have a healthy supply of sonic weapons (Sonic-Blasta Rifle, Sonic Cannon, Sonic Pistol) in your base inventory, you may want to sell most (if not all) of your older equipment. Because SWS platforms don't take up any space on this list, they become especially useful during base defense actions.

Equipment, weapons, and ammo that are stored on transports are not used during a base defense operation. For that reason, it is important to always have an ample supply of weapons and ammo in your base stores so your soldiers are not forced to fight the alien invaders without weapons!

Deployment

When the combat phase begins, you find your soldiers scattered throughout the base, generally clustered near the living quarters. Unlike the original X-COM, aliens that invade bases don't just stream from the airlock and hangars—they can appear anywhere! Your soldiers may very well find themselves surrounded by hostile aliens immediately after the first turn of combat!

Base Defense Tactics

Good Base Design

Probably the most important tactic is implementing a good base design, as profiled in Chapter 2. If your base is designed properly, you can quickly seal off corridors, block access points, and perform a systematic sweep of your base for hidden aliens. It's much easier to search one corridor of base facilities than it is to scour dozens of interlocked, maze-like facilities.

Kill Aliens Nearby

On your first turn, you should make all of your soldiers and SWS platforms turn around and scout the area immediately surrounding them, looking for aliens nearby. This prevents the aliens from getting any easy kills by shooting your soldiers at close range. If you do find an alien nearby, kill it as soon as possible.

As mentioned previously, aliens can appear *anywhere* in your base during these base assaults, so keep your eyes open.

Find All Your Soldiers

After you've eliminated all the aliens next to your soldiers, access the overhead map and examine the base layout and the location of your soldiers. Using this overhead map, you can plan your strategy. If your base follows the examples provided for good defensive base design detailed in Chapter 2, you should be able to send teams of soldiers along the separate wings of the base, searching both the surface levels and any levels above. As your soldiers advance through the base, you'll know that the areas they have visited will remain free from aliens.

Remember, closing off a single-width corridor that can only be entered from the north and south is much easier than defending a base facility surrounded on all sides by other facilities. This ultimately forces your soldiers to watch four directions instead of two.

Double-Door Tactics

X-COM bases in TFTD are blessed with a number of defensive structures. Most important of these are the double-doors that are used to connect most of your base facilities. Simply march two soldiers next to a door, and then make them open the door by right-clicking beyond it (see Figure 8.3). But don't go through the door—just make them open it. When it's open, your soldiers will have an unrestricted view of the corridor ahead.

Take a few shots at any aliens you see. When you end your turn, the doors you just opened will automatically close, thereby keeping your squaddies concealed from view. Employ this "open door -> fire -> close door" tactic as long as possible.

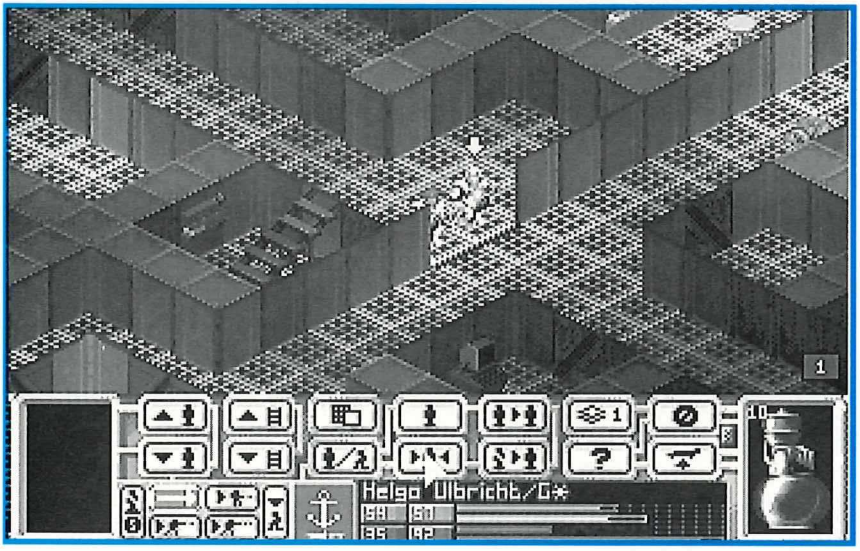


Figure 8.3. Soldiers hiding behind base doors.

SWS Platforms

SWS platforms make good scouts and base defenders. However, *never* rely on the Coelacanth/Aqua-Jet and the Displacer/PWT for base defense duties. Because their weapons only work underwater, they quickly become nothing more than over-sized clay pigeons for the trigger-happy aliens.

If one of your soldiers has the ability to use an MC disrupter, you can use the SWS platform to spot the aliens while the M.C. soldier controls or panics each of the aliens he encounters (see Figure 8.4). (See Chapter 10, "Molecular Control," for more information.)

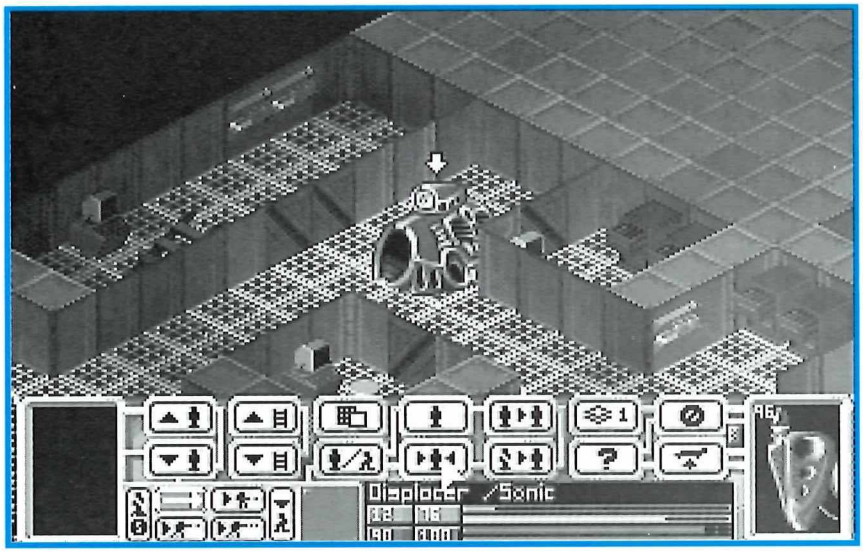


Figure 8.4. An SWS platform patrolling a base corridor.

Things That Go BOOM!

In the sub pens of your bases you will find racks of torpedoes stored along the walls. These torpedoes explode when struck with weapon fire or a grenade blasts (see Figure 8.5). Some aliens always seem to hide behind these racks of ready-made explosives, so hitting the torpedoes will most likely kill a few aliens in the process.

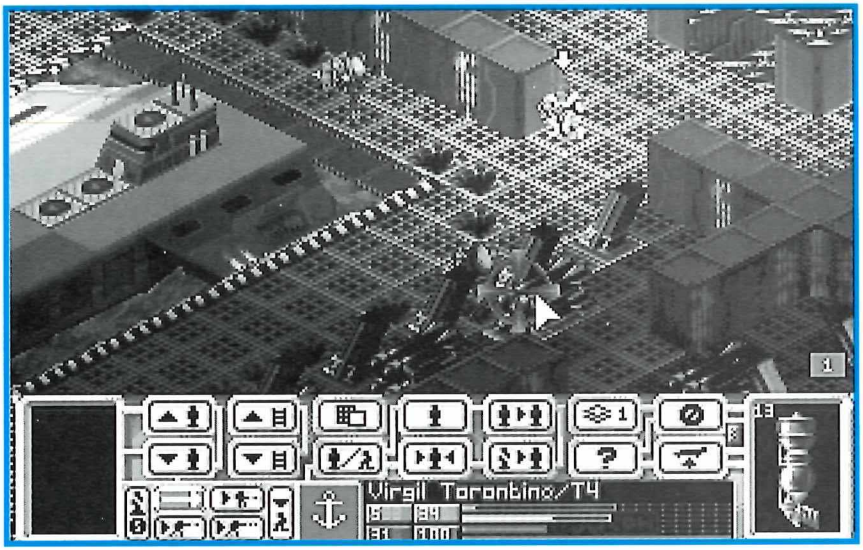


Figure 8.5. Racks of torpedoes in your sub pens will explode when hit.

Where the Aliens Hide

As in any other tactical combat site, the aliens can literally appear or move to any location on the map. In base defense actions, however, it seems that at least one alien is always hiding in the base airlock. To see if there are any aliens in the airlock, move a soldier next to the air lock door. Move the cursor behind the door and right-click; this process opens the door without having to move the aquanaut through it. From his vantage point your soldier should be able to spot any aliens hiding in any level of the airlock or in sub pens.

Ending the Base Defense

The base defense action ends when:

- All the aliens attacking the base have been killed.
- All the X-COM soldiers and SWS platforms at the base have been killed or destroyed.
- You abort the mission.

If you manage to kill all the aliens, you'll see a Combat Result screen much like the one shown in Figure 8.6.

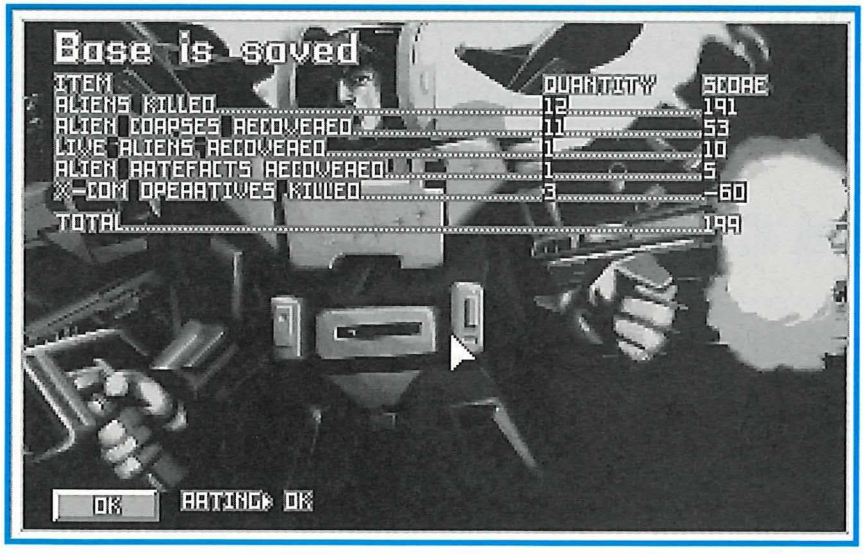


Figure 8.6. Victory! A base saved from the aliens.

If you abort the mission or all of your soldiers are killed, you'll see a Combat Result screen much like the one shown in Figure 8.7. Your base will be destroyed and removed from the Geoscape map.

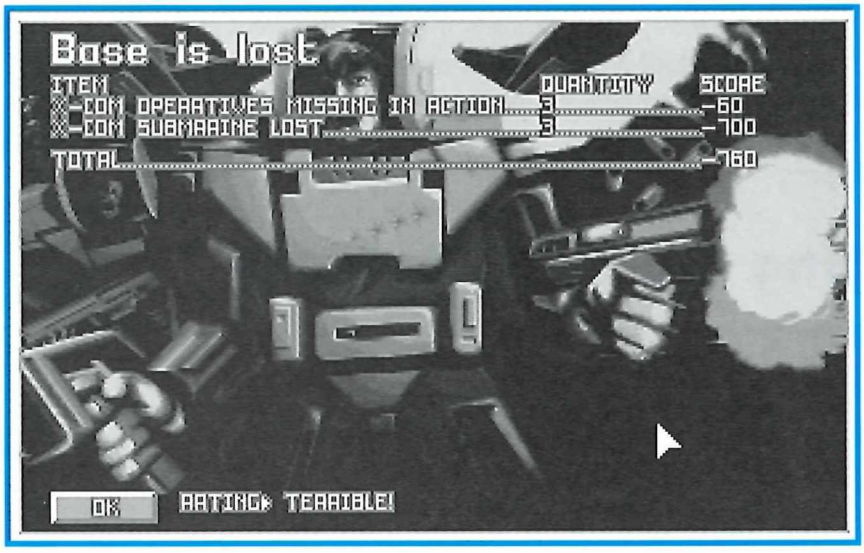


Figure 8.7. Drats! An X-COM base is destroyed by the aliens.

Note If you abort a base defense mission, the aliens will destroy your base automatically. For that very reason, you should be prepared to have every soldier fight to the death to defend the base.

Alien Colonies

The alien colonies are the bug-eyed equivalent of X-COM bases. From these underwater fortresses, the aliens plot the downfall of the human race and engage in hideous experiments on captured sea creatures and hapless human captives.

Finding Alien Colonies

Alien colonies are discovered by one of two methods:

1. Spotted by an X-COM patrol craft.
2. Located by X-COM agents.

The first method is the only method you have any direct control over. Using an interceptor or transport, you can send a craft out to patrol an area suspected to contain an alien colony. If the craft finds an alien colony, the colony will appear as a hollow pink square on the Geoscape map. To help locate alien colonies, pay close attention to the alien sub activity charts accessed from the Geoscape control bar. If an area exhibits a huge increase in alien activity, chances are good that an alien base is behind it all.

Preparing for the Assault

After you've discovered an alien colony, you can send an assault team out to destroy it. Alien colonies are one of the most difficult combat missions in X-COM, because they require the best in weapons, soldiers, and equipment. You should take as many soldiers as possible (no less than 10) to maximize your chances of victory. SWS platforms are useful only in the first stage of the alien colony mission, and next to useless in the second (subterranean) stage. Disrupter Pulse Launchers and plenty of Sonic Pulsers are a must for this mission.

Arriving at the Colony

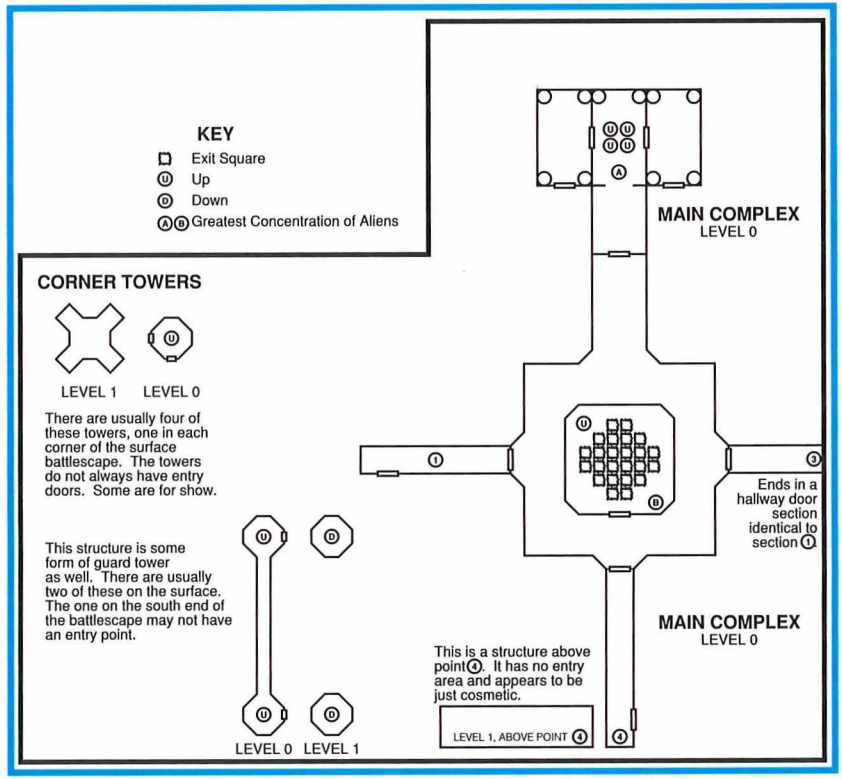
After you've arrived at the alien colony, you should deploy your troops. The deployment tactics presented in Chapters 6 and 7 are especially useful here, so refer to those sections for more information.

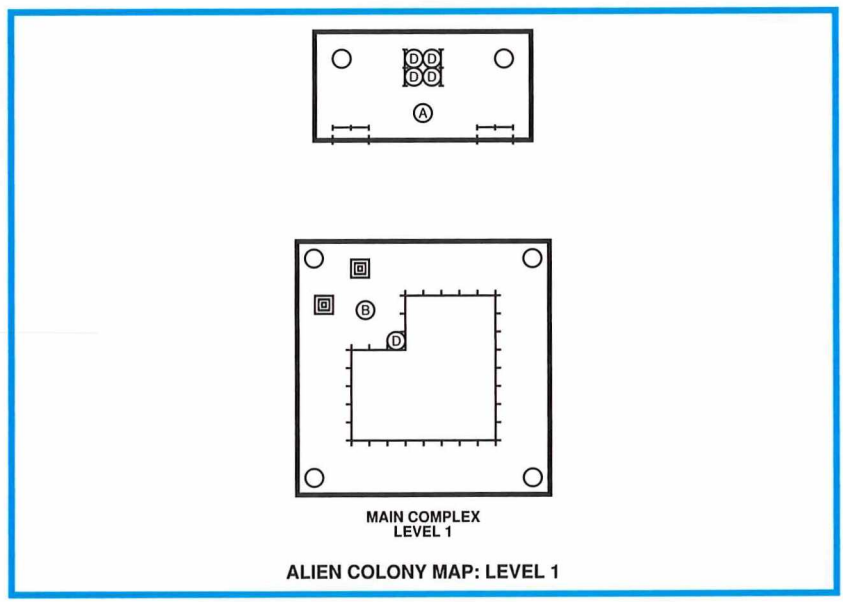
Surface Stage

The first stage of the alien colony is on the ocean floor. The stage ends when:

- All the aliens are killed.
- The mission is aborted.
- All X-COM soldiers are killed.
- All X-COM soldiers are on the exit squares and "abort" is selected.

If all the aliens are killed and/or the soldiers stand on the exit squares ("B" on the map below), the game advances to the second stage.





ALIEN COLONY MAP: LEVEL 1

Aliens Present

The two biggest concentrations of aliens in this stage are in areas "A" and "B" on the maps. The aliens you'll most likely face include the Tasoth, Aquatoids, Tentaculats, and Hallucinoids. Both the Aquatoids and the Tasoth usually have at least one M.C.-capable soldier, so protecting yourself against M.C. attacks is essential (see Figure 8.8).

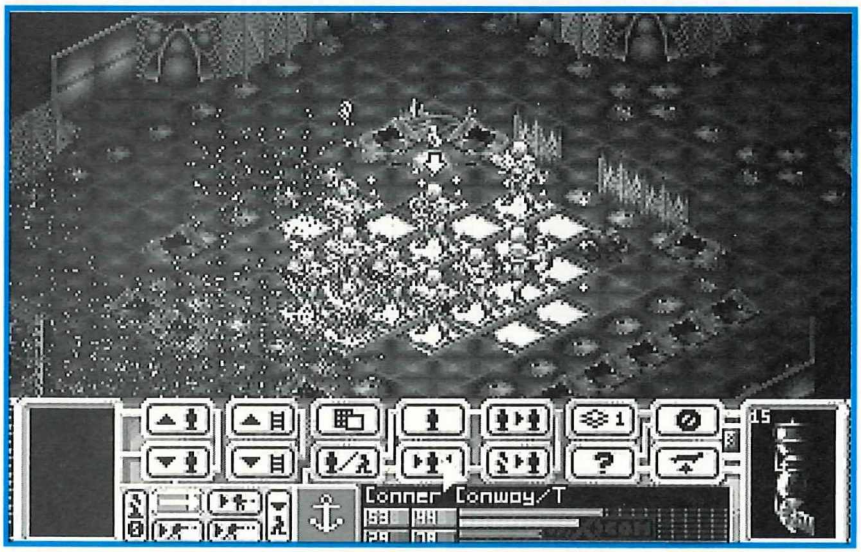


Figure 8.8. A team of aquanauts ready to enter the second stage of an alien colony mission.

When you exit this stage and proceed to Stage 2, all the weapons, equipment, and alien corpses that are not physically carried by an aquanaut are left behind. Because of this, make sure to scavenge as much equipment as possible from dead aliens and aquanauts.

Subterranean Stage

Compared to the subterranean stage, the surface level is a cakewalk. The subterranean stage consists of three large map levels stuffed with narrow passageways, rooms filled with clutter, and other obstacles. Most of your soldiers begin this stage deployed on green entry/exit squares (see Figure 8.9). However, some are scattered throughout all three levels of the complex. Before attempting to destroy all the aliens, you should first group as many soldiers as possible together into fire teams. This stage is simply too dangerous for any soldier to go it alone, so team them up for safety and protection.

Figure 8.9. A team of aquanauts on the entry/exit squares in the second stage of an alien colony mission.

Synomium Site

At the heart of the colony is the Synomium Device, located in the control room on the lowest level, level 0. Although the control room is in a different location at every colony, it always looks the same. To find it, use your overhead map to find a small room almost completely surrounded by a green railing, with an opening to the south (see Figure 8.10). A few Lobster Men will usually be in this room guarding the device—normally, you'll find two Lobster Man Commanders and one Lobster Man Navigator.

Capturing a live Lobster Man Commander and a live Lobster Man Navigator is crucial to your research efforts. Without a successful capture, you can never complete the game! The first time you assault an alien colony, avoid blowing away the control room—along with the Lobster Men inside—to smithereens. Instead, use a Thermal Shok Launcher or a Thermal Tazer to knock the Lobster Men unconscious. Grab the snoozing Lobster Men and make your soldiers physically carry them out of the room. Next, have one of your troopers toss a grenade into the room to destroy the Synomium Device (see Figure 8.11).

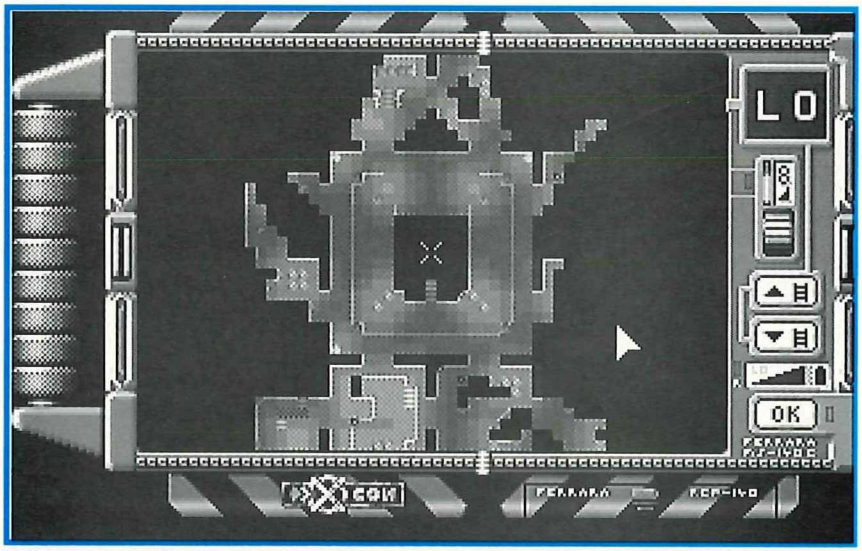


Figure 8.10. An overhead map view of the control room, which contains the Synomium Device.

Figure 8.11. A Lobster Man guards the Synomium Device after a grenade has blown out a wall of the control room.

Aliens Present

Almost all of the aliens you face in this stage are Lobster Men and Tentaculats. Because of the cluttered nature of the maps, Tentaculats are especially dangerous. Kill them as

soon as you see them. Most of the aliens usually congregate in the lowest level of the map. If you can't find the last few aliens, try searching on that level.

Ending the Mission

To end this stage, one of the following must happen:

- The Synomium Device must be destroyed and your soldiers must "abort" the mission when on the green exit squares (see Figure 8.12).
- All the aliens are killed.
- You abort the mission.
- All of your troopers are killed.

Figure 8.12. The Control Center Destroyed message displayed after the Synomium Device has been destroyed.

Note

Unless you kill *all* the aliens in the colony, you won't be able to keep any of the equipment carried by the aliens. Although it may take some time, killing all the aliens in the colony gives you a huge bonus in points and equipment.

9

Artifact Sites and T'leth

In this chapter, we'll take a look at the two most important types of combat missions in TFTD: artifact sites and the three-stage mission to T'leth, the home of the Great Alien. Scattered strategically throughout the depths of the world's oceans, the alien artifact sites each contain a powerful Synomium Device, an advanced piece of alien technology that serves as part of the Great Alien's global molecular control network. Although it is not essential to destroy all of the artifact sites to win the game, they are invaluable resources for high-ranking alien leaders, supplies, and equipment. Successfully destroying any artifact site will also net you a healthy amount of points as well.

T'leth is the single most important combat mission you and your troopers will ever face. When you're ready and willing to make the perilous journey to T'leth, there is no turning back: aborting the T'leth mission will cause you to lose the game outright. For those reasons, it's important to spare no expense when preparing for the T'leth mission. In this chapter, we'll take a look at the strategies, tips, and tactics that will help you give the Great Alien and his evil henchmen the righteous beating they've been asking for.

Artifact Sites

Scattered throughout the oceans of the world, the aliens have twelve ancient structures that they use as communications towers. Housed at each is a Synomium Device, which serves as an essential part of the alien communications network. Like terror sites, artifact sites will infrequently appear on the Geoscape screen. This similarity to terror site missions (see Chapter 7) runs even deeper, especially when you consider that ignoring an artifact site mission will add a hefty negative point value to your score, just like ignoring an alien terror site will. Artifact sites can't be "discovered" like alien colonies can: you can't send out patrols to find where they are located. The appearance of artifact sites seems to be totally random, although they have a tendency to appear in the first week of each game month.

When an artifact site is discovered, the Alien Activity Detected screen appears on the Geoscape. (See Figure 9.1.)

Figure 9.1. The Alien Activity Detected artifact site screen.

Preparing For the Trip

Artifact site missions—like Alien Colony missions—are some of the most difficult combat missions in X-COM, requiring the best in weapons, soldiers, and equipment. You'll want to take as many soldiers as possible (no less than 10) to maximize your chances at victory. SWS platforms are most useful in the first stage (surface), becoming much less so when you enter the second stage of the artifact site. For this reason, taking as many soldiers as possible may be a better strategy.

When loading your transport for an artifact site mission, you'd be well-advised to take along a Disrupter Pulse Launcher or two, enough Sonic Pulsers for each soldier, a Hydro-Jet Cannon or Gas Cannon with HE and P clips, and possibly a few M.C. specialists with M.C. Disrupters for controlling and panicking aliens you encounter. For more information on equipping and launching your transport, see Chapter 6, "Tactical Combat."

Arriving at the Artifact Site

When you've arrived at the Artifact Site, you should begin deploying your troops (see Figure 9.2). The deployment tactics presented in Chapters 6 and 7 will be especially useful here, so you may want to refer to those sections for more information.

Figure 9.2. Alien contact (artifact) site mission briefing.

Although randomly generated for each artifact site, the surface stage of one artifact site will look remarkably similar to the surface stages of other artifact sites. In all artifact site surface stages, the battlescape will be filled with a variety of unique structures, consisting of pyramids and hardened bunkers. The strategy you employ in the surface stage will be dependent on your goals. If you want to reach the exit area to the second stage of the mission as soon as possible, you should use SWS platforms, scouts in Magnetic Ion Armor, or molecular controlled aliens to spot the building holding the exit area, which appears as a large pyramid with a rectangular base and a large opening at one end. When you've spotted the exit area, you should move your soldiers quickly from the transport to the exit area, keeping them spaced roughly 7-8 spaces apart to minimize the effects of alien grenades thrown into your midst (see Figure 9.3).

Figure 9.3. Aquanauts battle for entry into Stage 2 of an artifact site mission.

If you'd rather hunt down and kill all the aliens instead, the best strategy to use is to sweep your soldiers across the battlescape in a broad movement, with the in-line formation being a particularly good choice. All of the pyramids in the area will have to be painstakingly searched from top to bottom by aquanauts, because the passageways and corridors of these structures are too narrow for SWS platforms to pass through.

Watch out for Tasoth and Aquatoid snipers hiding in the pyramids, and use molecular control on the aliens you encounter to scout the terrain around the pyramids. Tasoth usually can be found hiding in the tiny bunkers that dot the battlescape, and Tentaculats frequently will hide behind or within the structures on this level. To enter the second stage of the artifact site, you must either kill all the aliens on the surface level or move all of your soldiers to the exit area and press the Mission Abort button (see Figure 9.4).

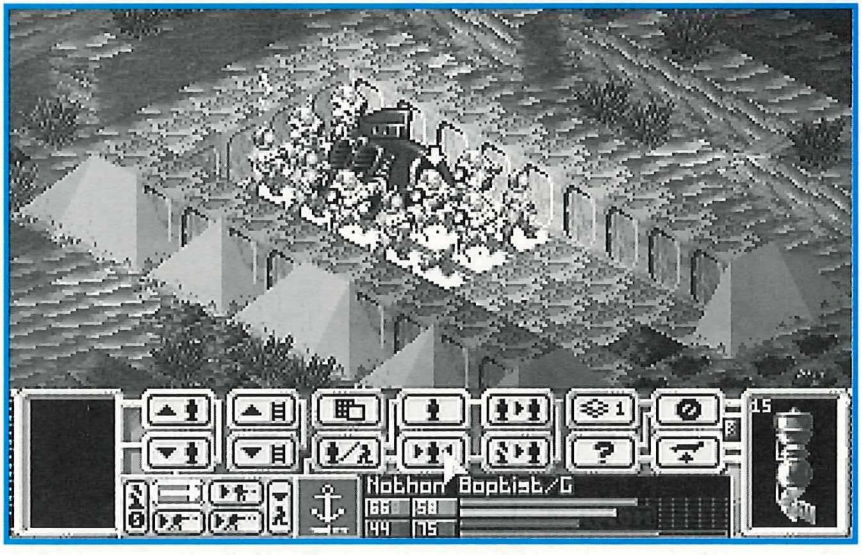
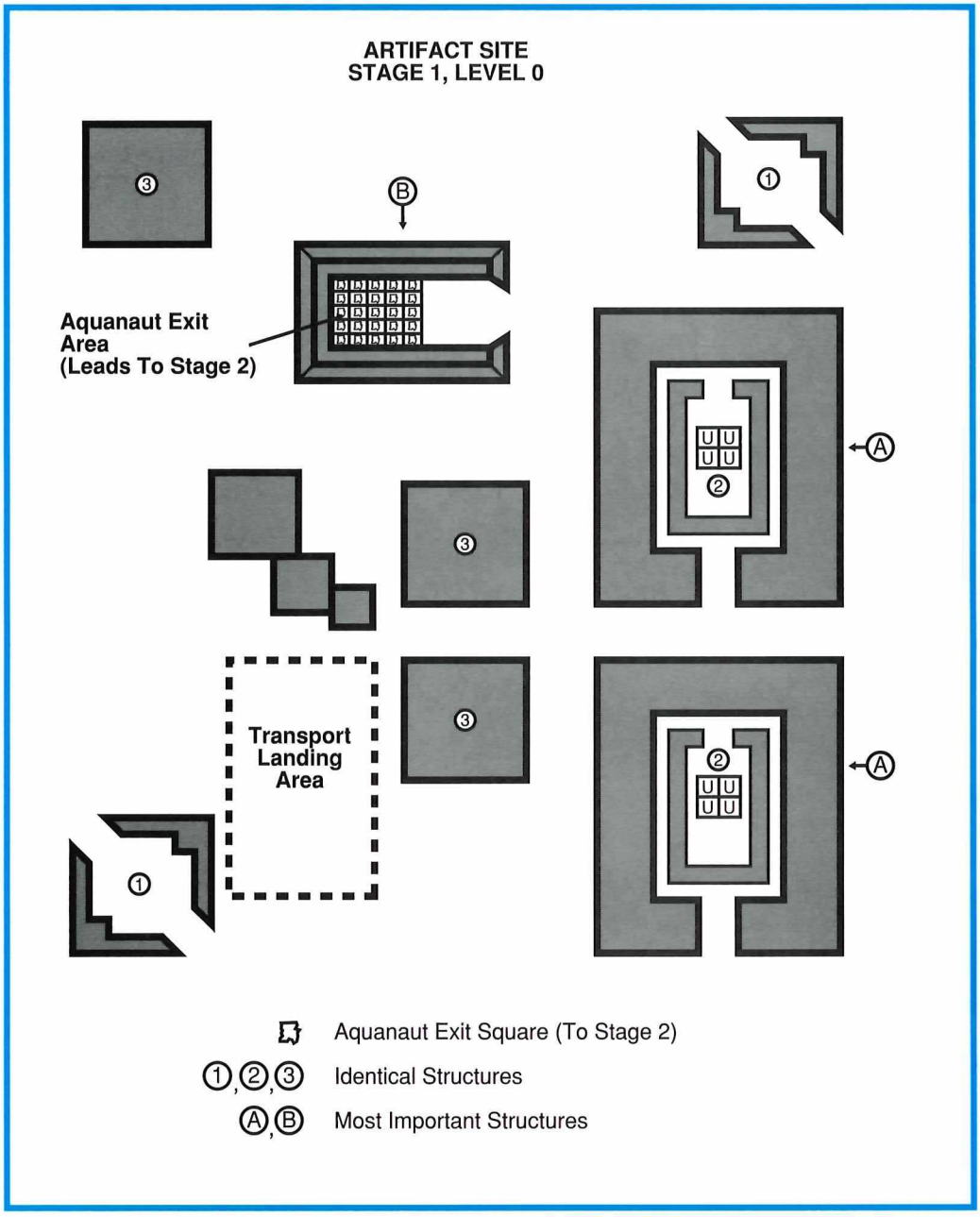
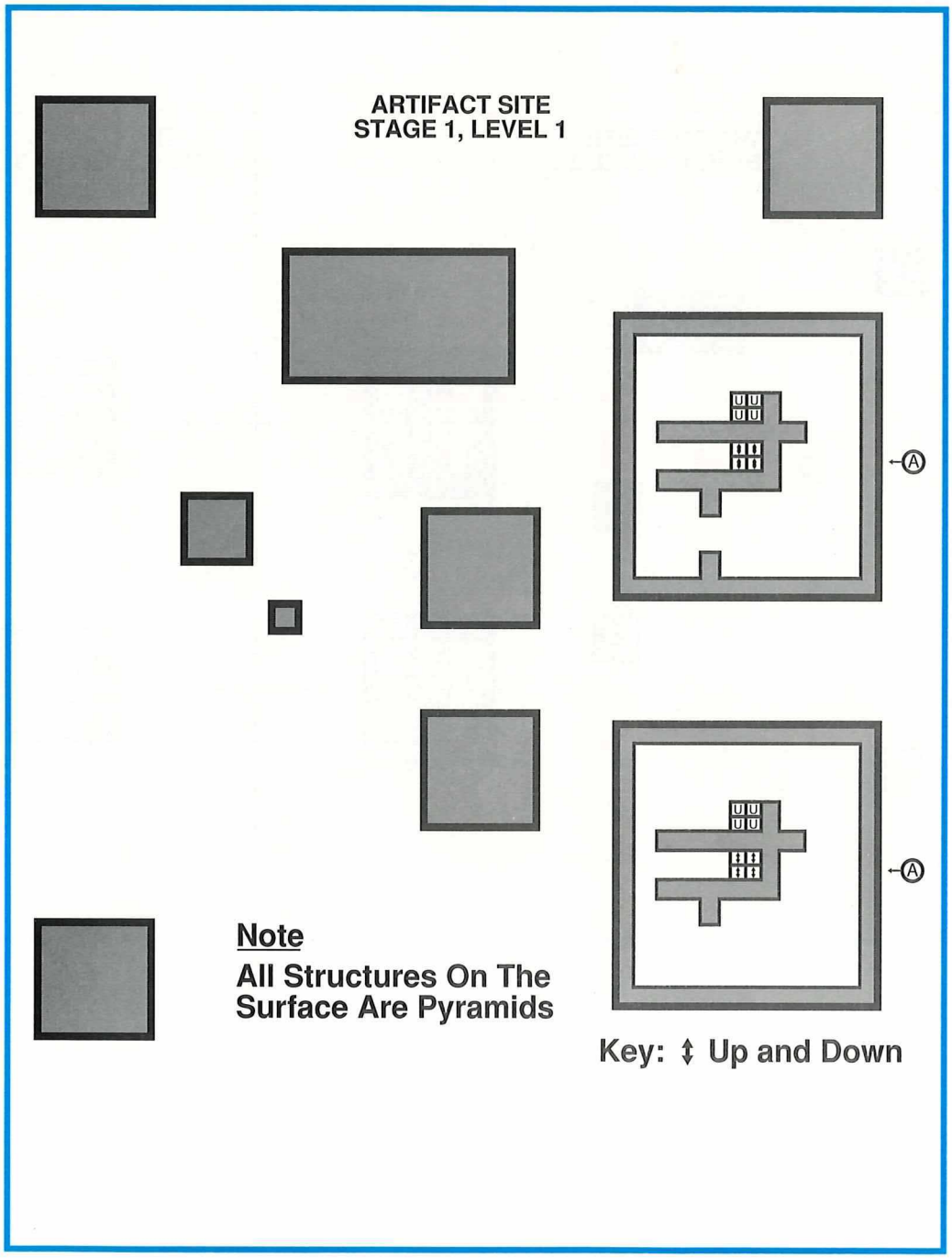
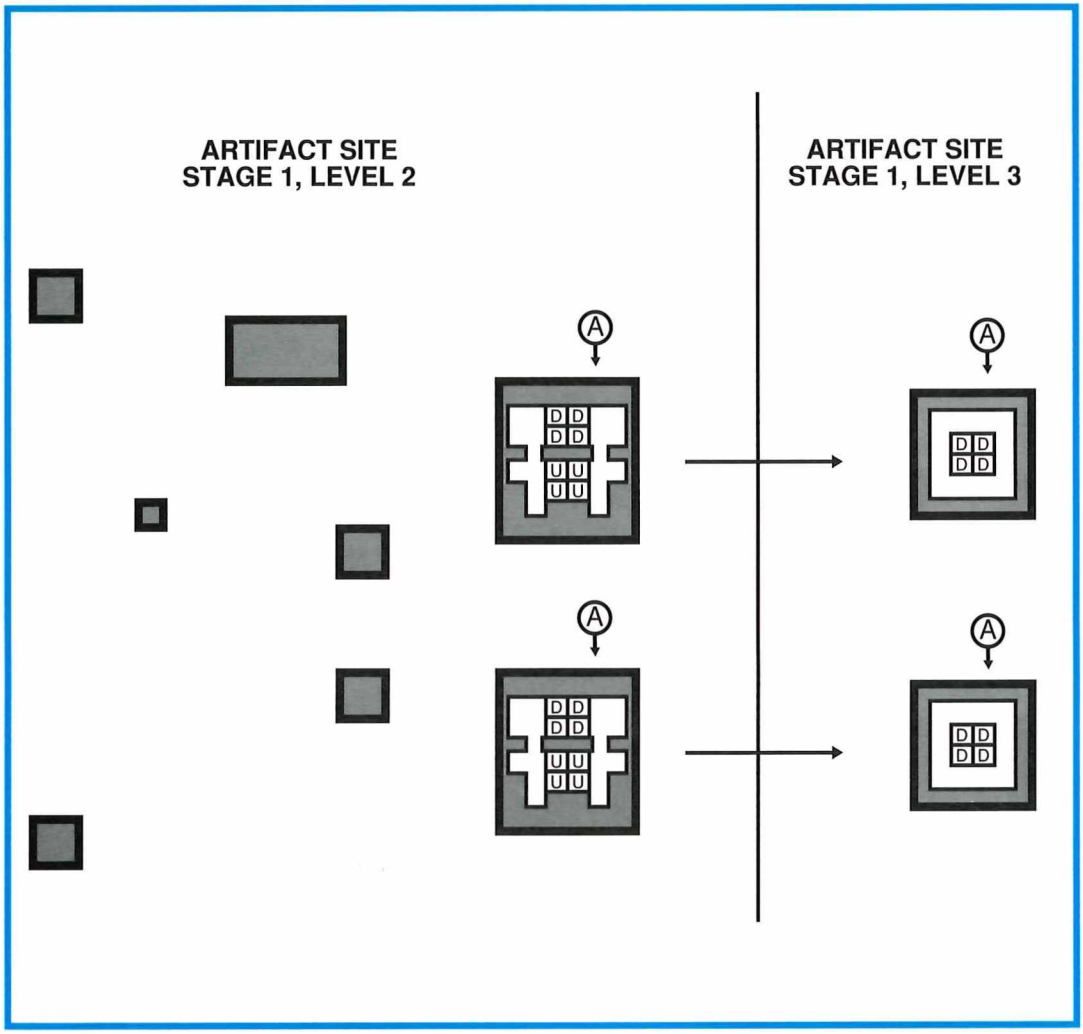


Figure 9.4. Aquanauts standing in the exit area of Stage 1 of an artifact site mission.

When you exit this stage and go on to the second stage, all the weapons, equipment, and alien corpses that are not physically carried by your aquanauts will be left behind. Because of this, be sure to scavenge as much equipment as possible from dead aliens and aquanauts.


ARTIFACT SITE
STAGE 1, LEVEL 0
Aquanaut Exit Area (Leads To Stage 2)
Transport Landing Area
Aquanaut Exit Square (To Stage 2)
①,②,③ Identical Structures
Ⓐ,Ⓑ Most Important Structures


ARTIFACT SITE
STAGE 1, LEVEL 1
A
A
Note
All Structures On The Surface Are Pyramids
Key: ↕ Up and Down


ARTIFACT SITE
STAGE 1, LEVEL 2
ARTIFACT SITE
STAGE 1, LEVEL 3
A
A
A
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D D
D D
U U
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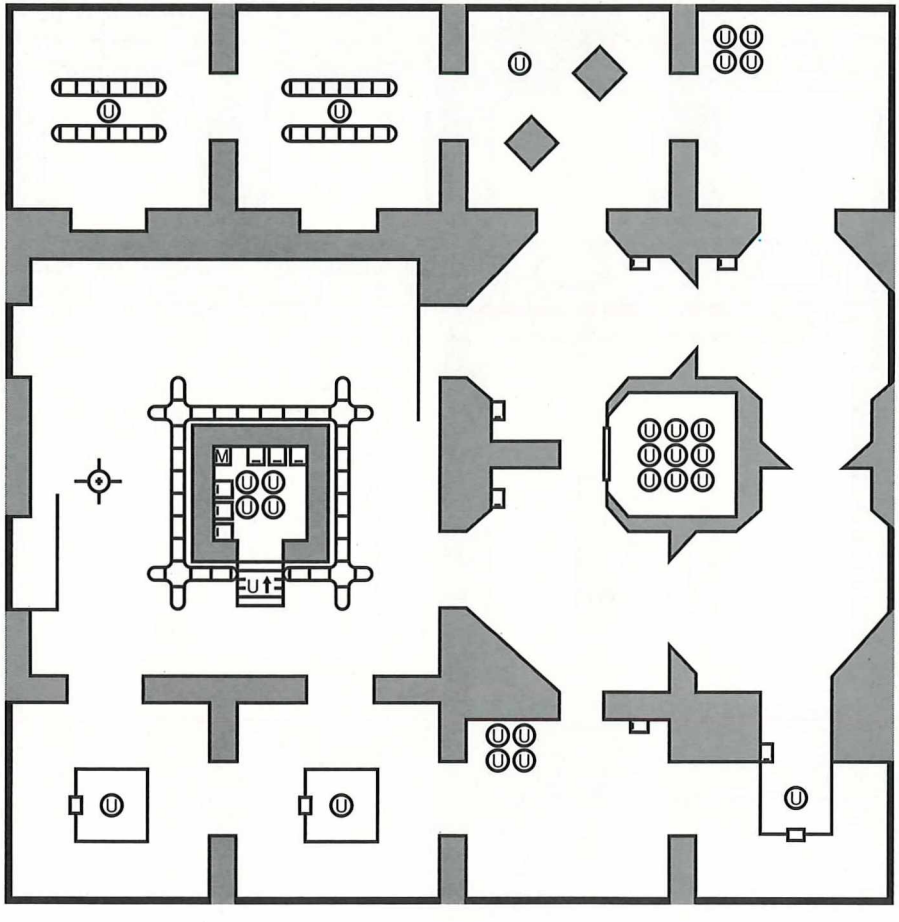
TFTD ARTIFACT SITE
STAGE 2 (SUBTERRANEAN), LEVEL 0



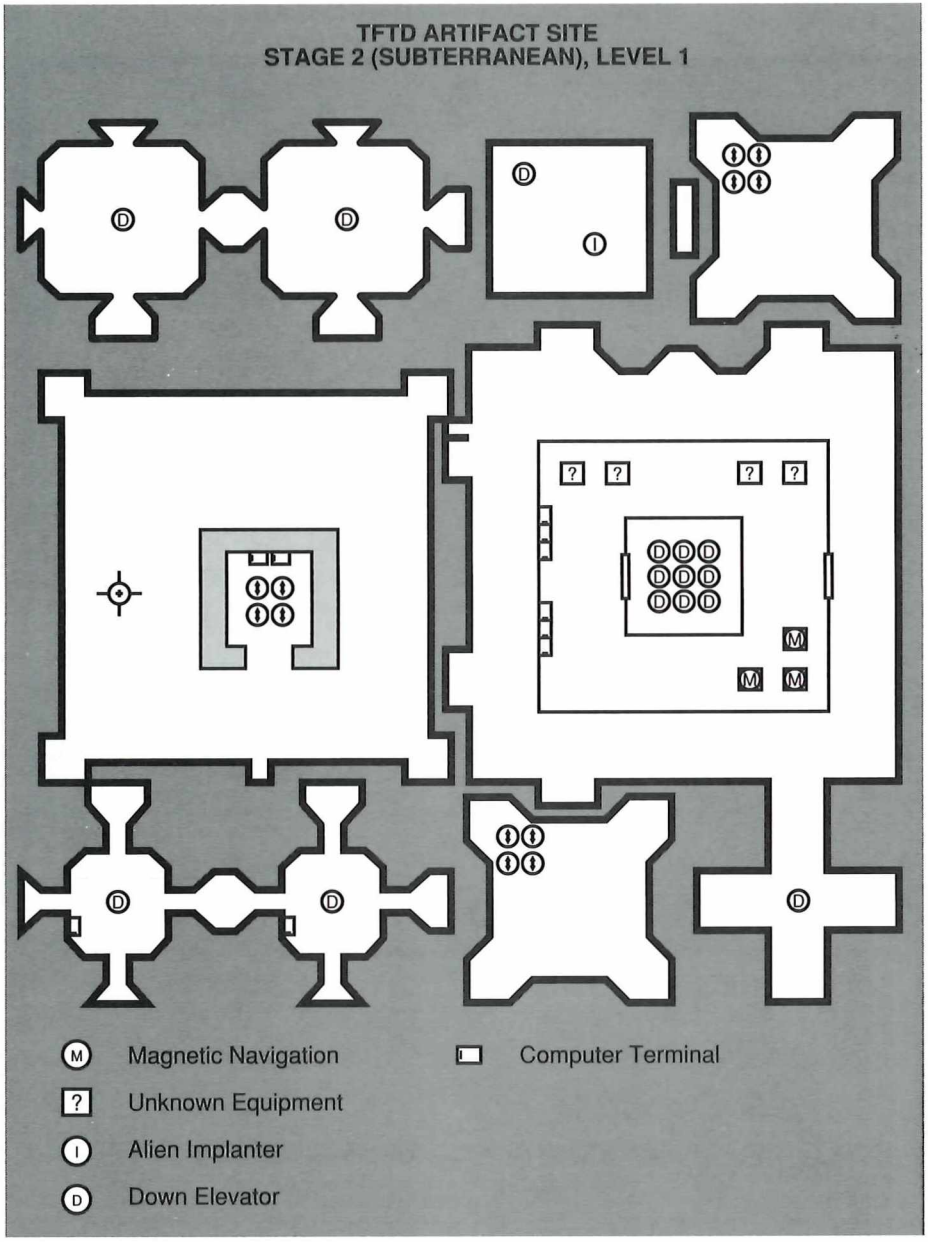
and — Doors

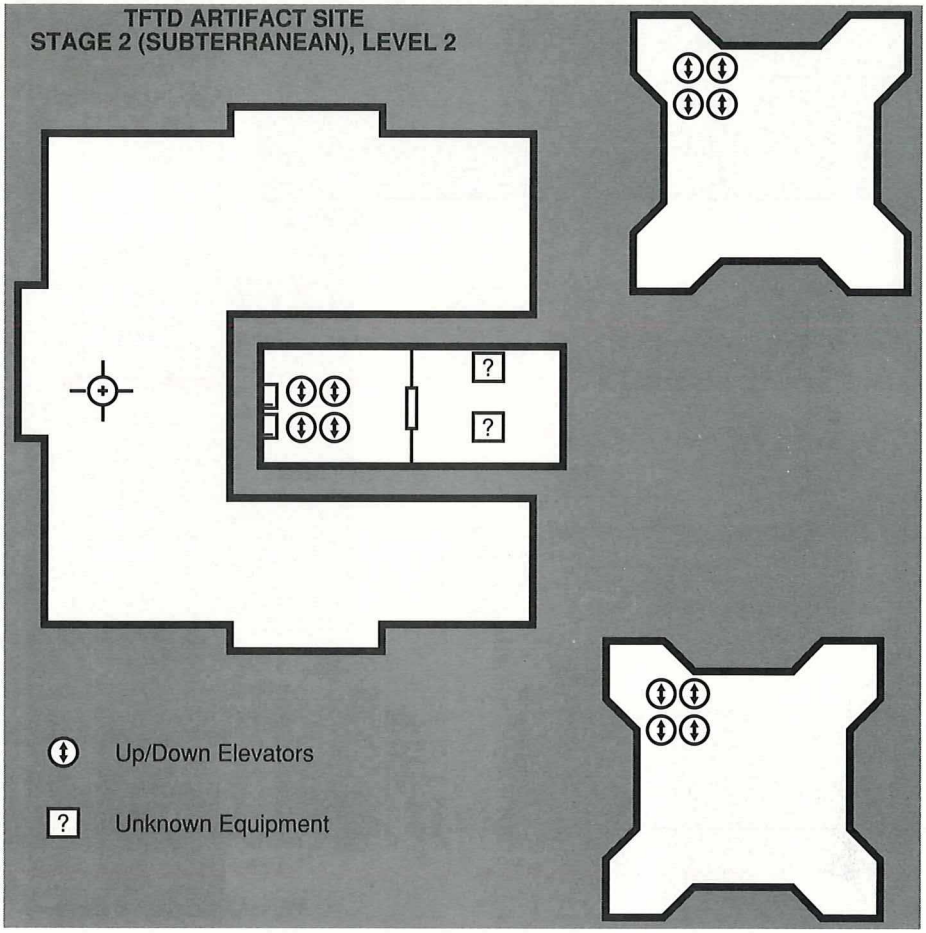
Brass Piping

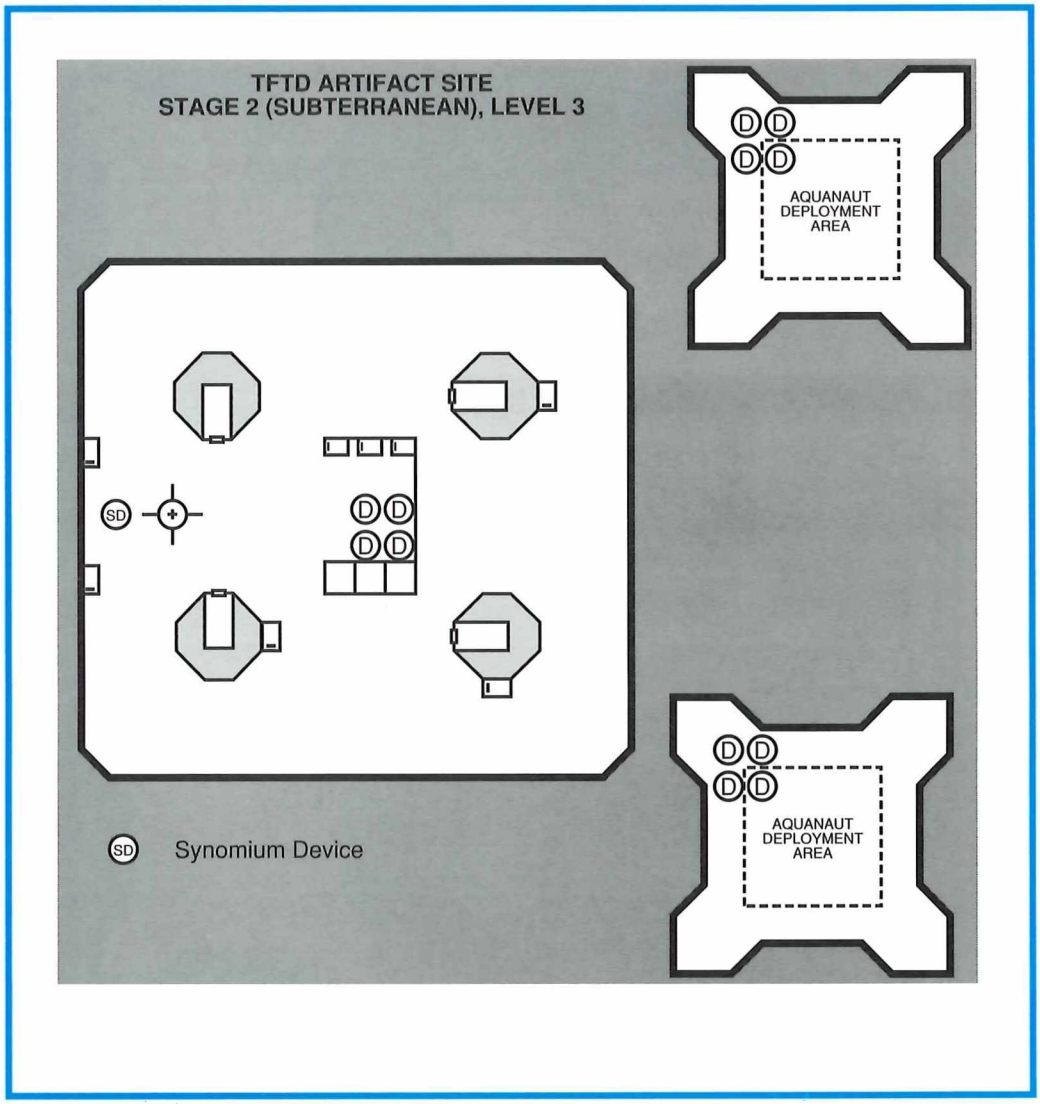
Up Elevator

Computer Terminal

Waypoint Location for Disrupter Pulse Bomb (see Chapter 9 Text)


TFTD ARTIFACT SITE
STAGE 2 (SUBTERRANEAN), LEVEL 1
M Magnetic Navigation
? Unknown Equipment
I Alien Implanter
D Down Elevator
Computer Terminal


TFTD ARTIFACT SITE
STAGE 2 (SUBTERRANEAN), LEVEL 2
?
?
Up/Down Elevators
?
Unknown Equipment


TFTD ARTIFACT SITE
STAGE 2 (SUBTERRANEAN), LEVEL 3
AQUANAUT DEPLOYMENT AREA
AQUANAUT DEPLOYMENT AREA
SD
Synomium Device

Subterranean Stage

After your aquanauts have successfully made it past the surface stage, you'll have a chance to outfit your troopers again, using only the equipment and weapons that they managed to carry with them from the first stage. After you've re-equipped all of your soldiers, you'll find them deployed throughout the second stage of the artifact site, with the biggest concentration of soldiers deployed on the green entry/exit squares (see Figure of 9.5). However, some will be scattered throughout all three levels of the complex. Before attempting to destroy all of the aliens, you should first group as many soldiers as possible together into fire-teams. This stage is simply too dangerous for any soldier to go it alone, so have them team up for safety and protection.

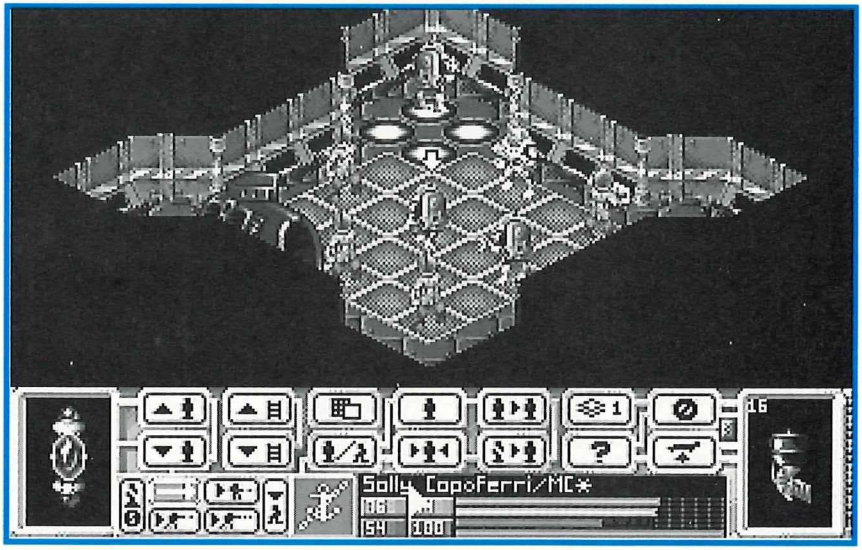


Figure 9.5. Aquanauts on the green entry squares in Stage 2 of an artifact site mission.

Aliens Present

The subterranean artifact site level is called home by a variety of aliens, including Tasoth, Aquatoids, Hallucinoids, and Tentaculats. Due to the multi-leveled, Byzantine nature of the artifact site layout, Tentaculats can be especially dangerous, dashing out from behind cover to turn your soldiers into zombies! Your first priority should be to kill every Tentaculat that you come across.

The Synomium Device

At the heart of the artifact site is the Synomium Device, located in a control room at the highest level of this stage, level 3 (see Figure 9.6). Although the areas surrounding this control room vary from artifact site to artifact site, the path to the control room is *always* the same. The control room can only be accessed by entering the base of a tower, which is usually located somewhere near the center of the map on Level 0. Once inside the tower, an elevator provides the only access route to the control room. The levels between the entry stairs to the tower (on level 0) and the control room (level 3) are usually occupied by Tentaculats, making the trip to the control room a hazardous task for any aquanauts attempting to do so.

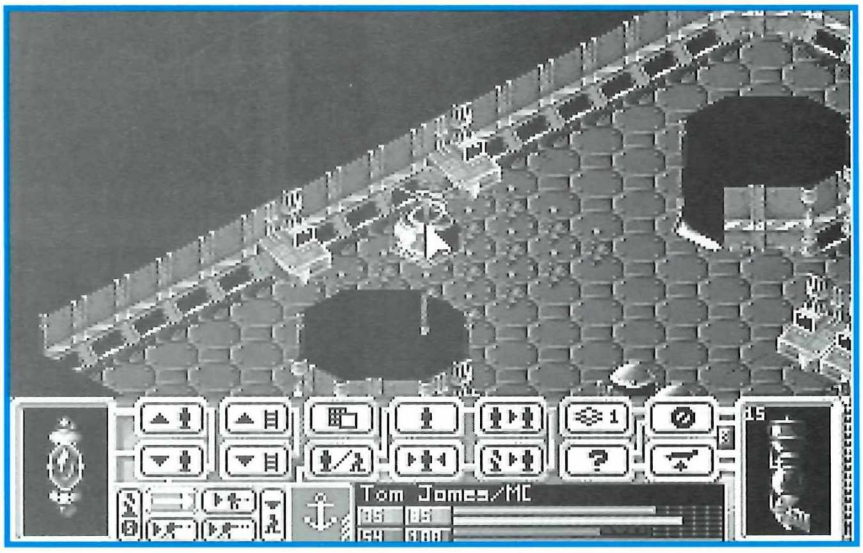


Figure 9.6. The Synomium Device.

Destroying the Synomium Device

Although the Synomium Device does not have to be destroyed to end the mission (if all the aliens are killed, the mission also ends *and* the Synomium Device is considered destroyed), destroying it and then exiting the Artifact Site is probably the safest strategy if you're low on soldiers or don't want to spend the time hunting down every last alien in the artifact site. If your goal is to destroy the Synomium Device, there are generally two ways you can go about it: the hard way or the easy way.

The Hard Way...

In this strategy, the Synomium Device is destroyed by moving individual aquanauts up to the control room on level 3 and having them finish off the Synomium Device with weapons fire or a well placed grenade. Listed below are the steps you may want to take when using this strategy.

1. **Secure the tower base.**

   The tower that leads up to the control room is located in a large room, usually in the center of the map on level 0. This large room is usually occupied by 2–3 Tentaculats, 2–3 Aquatoids, and, occasionally, a Hallucinoid or two. If you're playing at a higher difficulty setting, you'll encounter more aliens.

   To begin, move at least five or six soldiers to the base of the tower and have them establish a defensive perimeter around the stairs leading to the elevator. Tentaculats are usually hiding in the upper alcoves along the edge of the large room, and will usually dash out and try to zap one of your soldiers. Leave at least four soldiers at the base of the tower, facing different directions and using a kneeling posture to increase firing accuracy (see Figure 9.7).

Figure 9.7. Aquanauts guarding the entrance to the tower leading to the Synomium Device.

2. **Enter the tower.**

   After the base of the tower is secured, you should send 2–3 soldiers up the stairs and into the tower. There is one level below the level the soldiers will now be standing on, so be sure and send one soldier down to check the small room underneath. Each level of the tower may house a Tentaculat or an Aquatoid soldier, so search these small rooms thoroughly before advancing towards the control room.

3. **Going up?**

   Next, begin moving your soldiers up into the control room. Try to limit their movement to one level per turn, allowing them plenty of TUs for opportunity fire. As they ascend, have them search each of the small rooms (mentioned previously) for any hiding aliens.

4. **Bull's-eye!**

   Eventually, your soldiers should reach the control room. The Synomium Device (which looks like a brass pedestal with two revolving steel rings in motion above it) will be on the left side of the screen. Using weapons fire or a primed grenade (the preferred method), destroy the Synomium Device (see Figure 9.8). When the device is destroyed, withdraw your soldiers from the tower and head towards the green exit squares.

Figure 9.8. An aquanaut prepares to destroy the Synomium Device.

The Easy Way...

If you're low on soldiers or just want to destroy the Synomium Device as quickly as possible, use this strategy instead. This strategy requires the use of a Disrupter Pulse Launcher.

1. **Scout the terrain.**

   To use the Disrupter Pulse Launcher against the control room, you need to first scout the area around the tower leading to the control room to find a clear pathway for the Disrupter Pulse to travel after it has been launched.

2. **Plot the path.**

   After you're sure you have a clear path into the large room containing the tower, launch the Disrupter Pulse and begin plotting its path. Have it move into the large room and around to the left side of the tower (see Figure 9.9).

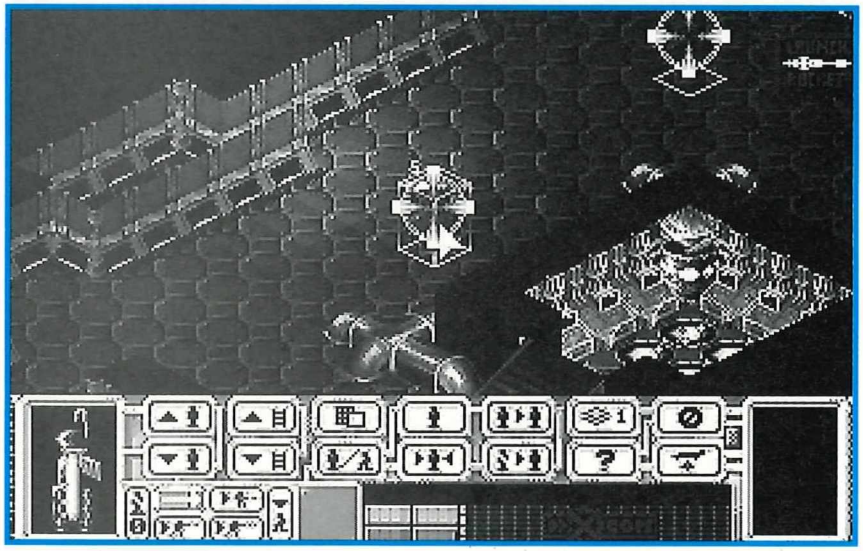


Figure 9.9. Plotting the path of a Disrupter Pulse Bomb...

Ideally, you should place a waypoint about 4–6 spaces to the left of the tower, as shown in Figure 9.10. Next, use the elevation controls to provide you with a view of the third map level (level 2). Place another waypoint on level 2, as shown in Figure 9.11. Next, use the elevation control to change to level 3, and place another waypoint directly above the one you just placed. Level 3—which contains the control room and the Synomium Device—should be shrouded in darkness. Don't worry about making a waypoint directly on the Synomium Device. Just as is the case with horseshoes and hand grenades, placing the waypoint close to the Synomium Device should be good enough. Place the final waypoint then select the **LAUNCH ROCKET** button in the upper-right corner of the screen. Sit back and watch the fireworks!

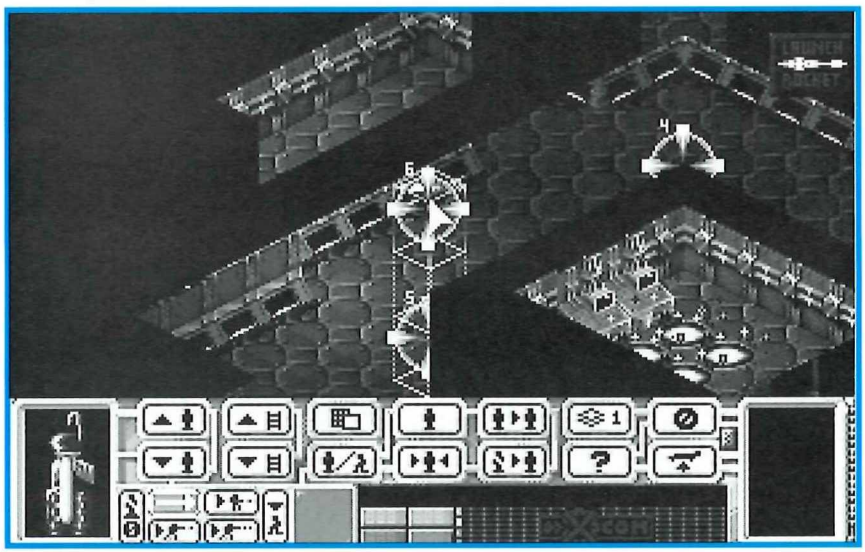


Figure 9.10. ... which is heading toward the floor directly beneath the Synomium Device.

3. **Kablooey!**

   If the Disrupter Pulse doesn't hit anything on the way, it should travel into the large room, move to the left of the tower, and then abruptly race upwards towards the ceiling. The impact of the resultant blast will destroy the Synomium Device on level 3, saving you the trouble of having to march your soldiers into harm's way (see Figure 9.11).

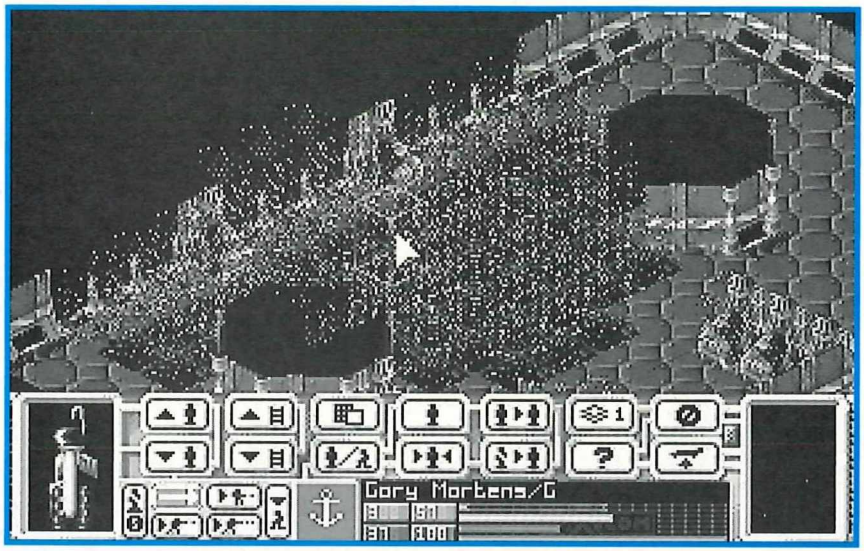


Figure 9.11. Kablooey! The results of the Disrupter Pulse Bomb attack on the Synomium Device.

After the Synomium Device has been destroyed, select the **END TURN** button on the Battlescape control bar. The turn ends, and the message displayed in Figure 9.12 appears.

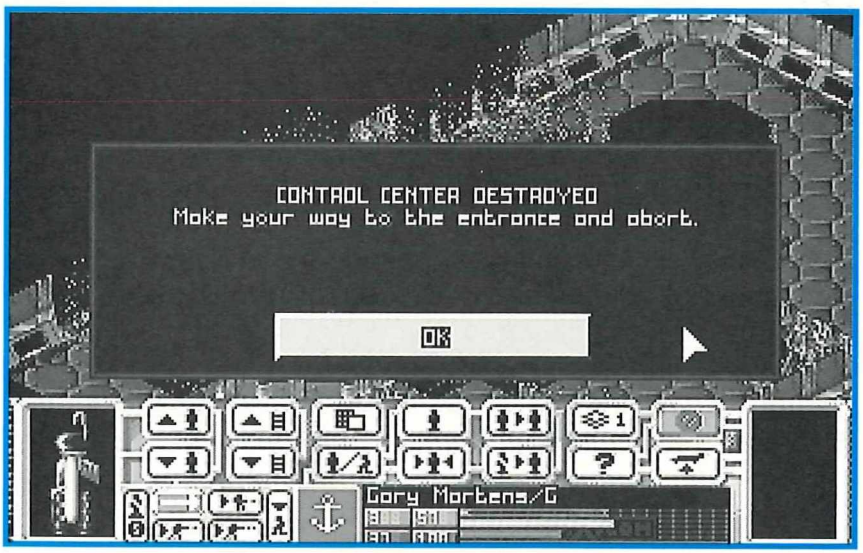


Figure 9.12. After the Synomium Device is destroyed, ending the turn gives you this message.

On the next turn, you can begin moving your soldiers back to the green exit areas.

Ending the Mission

To end the final stage of the artifact site mission, one of the following must happen:

- The Synomium Device is destroyed and your soldiers must "abort" the mission when on the green exit squares.
- All the aliens are killed.
- The mission is aborted.
- All of your troopers are killed.

Unless you kill *all* the aliens in the artifact site, you won't be able to keep any of the equipment carried by the aliens. Although it may take some time, killing all the aliens present in the artifact site will give you a huge bonus in points and equipment.

T'leth

Just as your war with the aliens begins with an interception, it also ends with one. If you've managed to build the Leviathan transport craft, you can attempt the final mission at any time. You do not have to destroy the twelve Synomium sites to win the game. If you have done your research, then you will know of the alien city called T'leth.

This section of Chapter 9 discusses in detail the final mission of the game, which is the ground assault on the ancient alien city of T'leth, home of the Great Alien. If you *do not* wish to have the ending of the game spoiled for you, stop reading now!

Research Topics and the Leviathan

In order to reach T'leth, you'll need to capture a live Lobster Man Navigator. You will need to interrogate him, and also the objects of alien propulsion and navigation you have obtained from recovery missions. After this, you must research alien sub construction. Then follow the path down the new ship research until you have the Hammerhead blueprints. You do not need to build either the Manta or the Hammerhead.

The next major step is to capture and interrogate a Lobster Man Commander. You can usually find a Lobster Man Commander in the control room of an alien colony. After you've successfully researched one, you should be given the research topic T'LETH: THE ALIEN CITY. After researching this topic and building the Leviathan transport, you're ready to begin the final mission of the game. For information on the research necessary to get to this point, see Chapter 3, "Money, Manufacturing, and Research."

Aquanauts

The mission to T'leth will be the final mission of the game. A huge, three-stage combat mission, it will require the utmost in weapons and equipment. That being the case, you should take as many veteran and experienced soldiers as you can. A good mix of battle-hardened, well trained soldiers in a variety of specialization areas will be the key to success. You'll face many aliens with molecular control abilities, so it is vital that all of your soldiers have molecular control strengths of no less than 50 or 60. Molecular control specialists will be extremely helpful, although you can finish T'leth without using them at all.

Weapons and Equipment

The T'leth mission requires that you take only the most powerful and advanced weaponry, armor, and equipment. In addition, make sure that all of your soldiers are wearing no less than the best armor protection available. More specifically, all your aquanauts should be wearing Magnetic Ion Armor. The effectiveness of taking SWS platforms to T'leth is diminished greatly by two aspects of the T'leth mission. First, the narrow corridors and tight passageways of T'leth stages 1 and 2 will restrict their movement and force them to expend valuable ordnance on widening passageways so they can fit through them. Second, because T'leth is a three-stage mission, SWS platforms with limited amounts of ammunition capacity—such as the Displacer/P.W.T. and the Coelacanth/Aqua Jet—will most likely run out of ammunition well before you reach the final stage. For that reason, you may want to rely more heavily upon the Displacer/Sonic and the Coelacanth/Gauss, which have much larger ammo capacities.

Sample Leviathan Loadout

18 Aquanauts and 2 SWS Platforms		Space Used
2 SWS Platforms (1 Displacer/Sonic & 1 Displacer/P.W.T.)		2
18 Aquanauts consisting of:		
4 Troopers (T)		
Each carries:	1 Sonic Cannon *or* 1 Sonic Blasta Rifle w/1 extra clip	8
	2 Sonic Pulsers	8
5 Heavy Weapons (HW)		
HW#1 carries:	1 Hydro-Jet Cannon (loaded with P) w/2 extra clips (1P, 1HE)	3
	2 Sonic Pulsers	2
HW#2 carries:	1 Gas Cannon (loaded with HE) w/2 extra clips (1P, 1HE)	3
	2 Sonic Pulsers	2
4 Grenadier-Medics (G)		
Each carries:	1 Sonic Pistol w/1 extra clip	4
	6 Grenades and Sonic Pulsers	12
	1 Medi-Kit	2
2 Point men/Scouts (P)		
Each carries:	1 Sonic-Blasta Rifle w/1 extra clip	4
	3 Grenades *or* Sonic Pulsers	6
	1 Particle Disturbance Sensor	2
3 M.C. Specialists (MC)		
Each carries:	1 M.C. Disrupter	3
	1 Sonic Pistol w/1 extra clip	6
	1 Sonic Pulser	3
	Total space used:	**80**

Loading the Leviathan

After you've decided on the troops and equipment you're going to take, load up the Leviathan and double-check the aquanauts, equipment, and weapons that you're carrying. When you're satisfied with everything, you're ready to launch (see Figure 9.13).

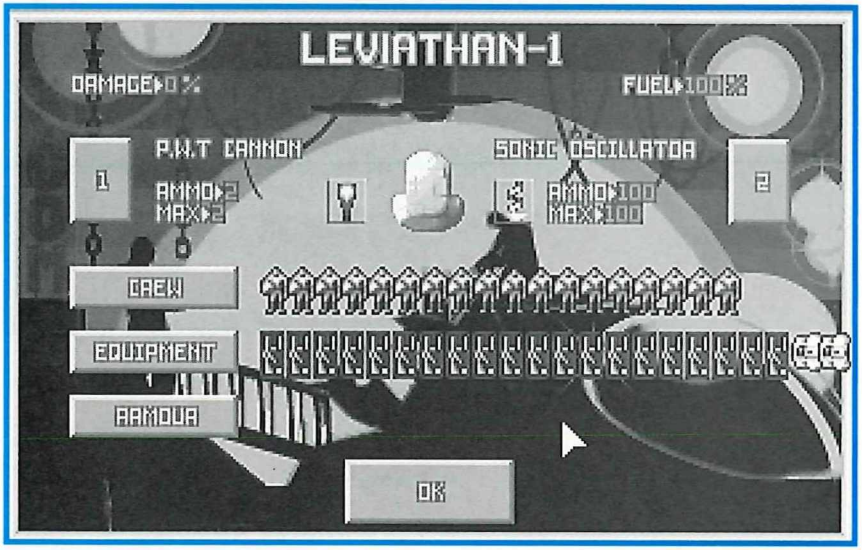


Figure 9.13. Loading the Leviathan transport for the mission to T'leth.

The Beginning of the End

With the transport loaded, you're ready to begin the mission that will be the last and greatest battle in TFTD—the destruction of T'leth, the home city of the Great Alien and his slimy-skinned henchmen.

Destination: T'leth

In order to reach T'leth, click the **INTERCEPT** button found at the top of the Geoscape button bar. From the interception window that appears, select your loaded Leviathan. Another window appears, giving you the opportunity to select a target, cancel the interception request, or go to T'leth. If you're ready, select T'leth to begin the launch (see Figure 9.14).

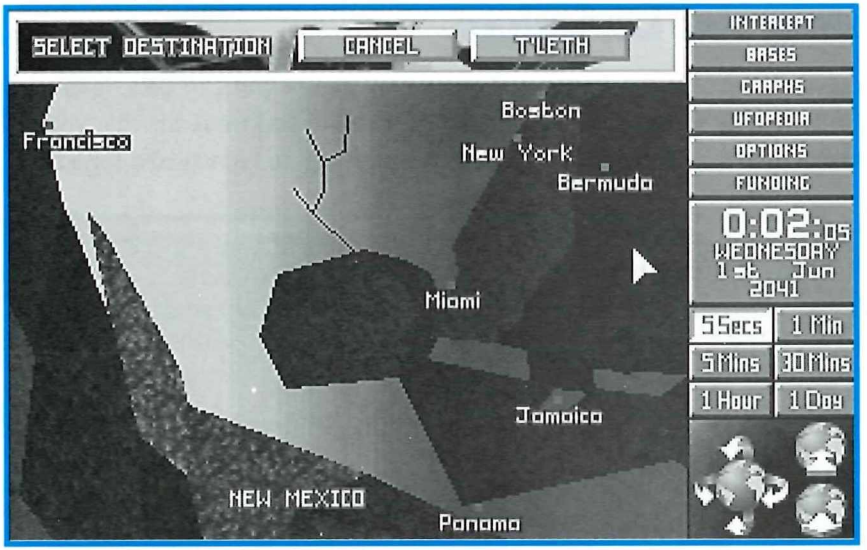
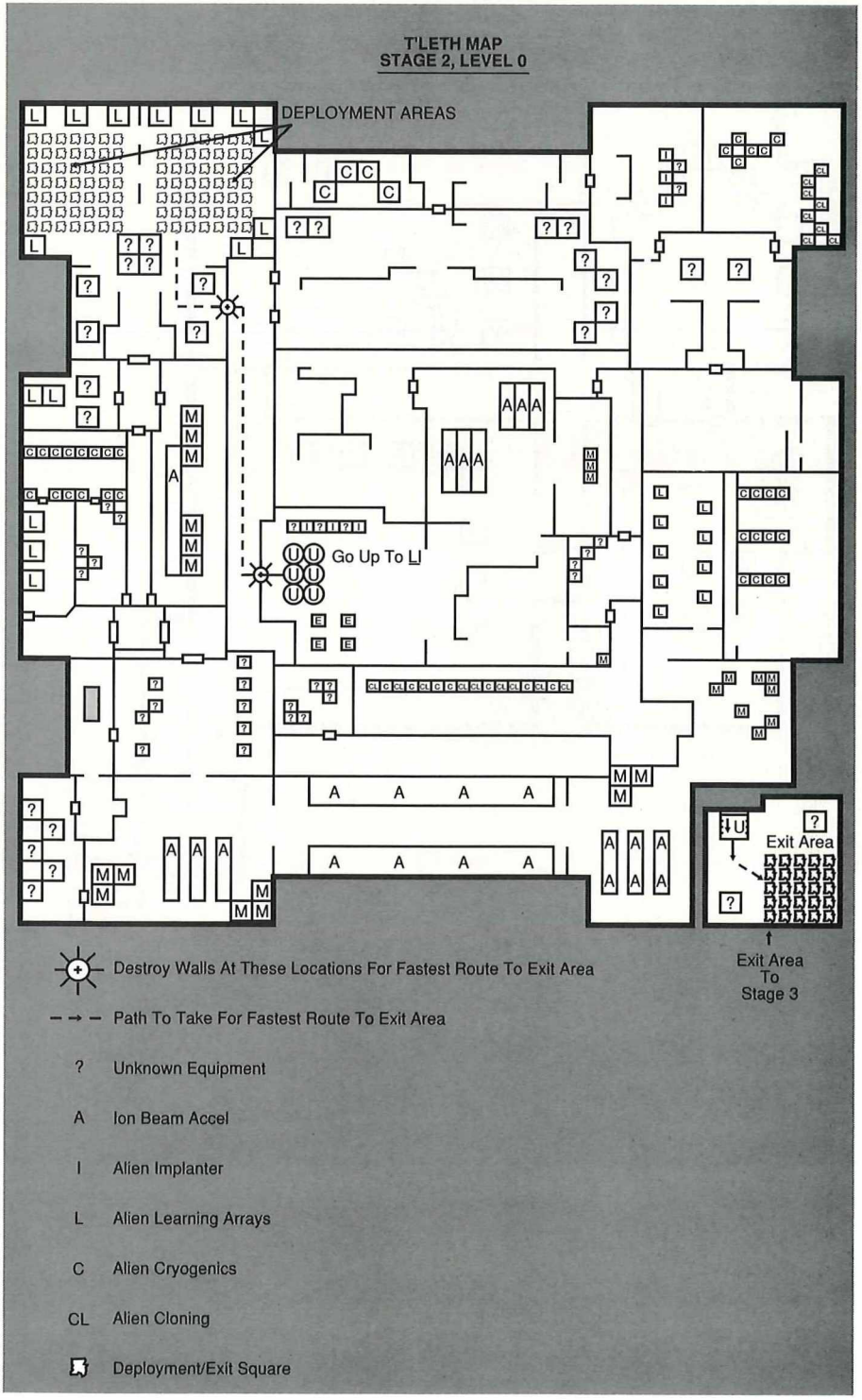
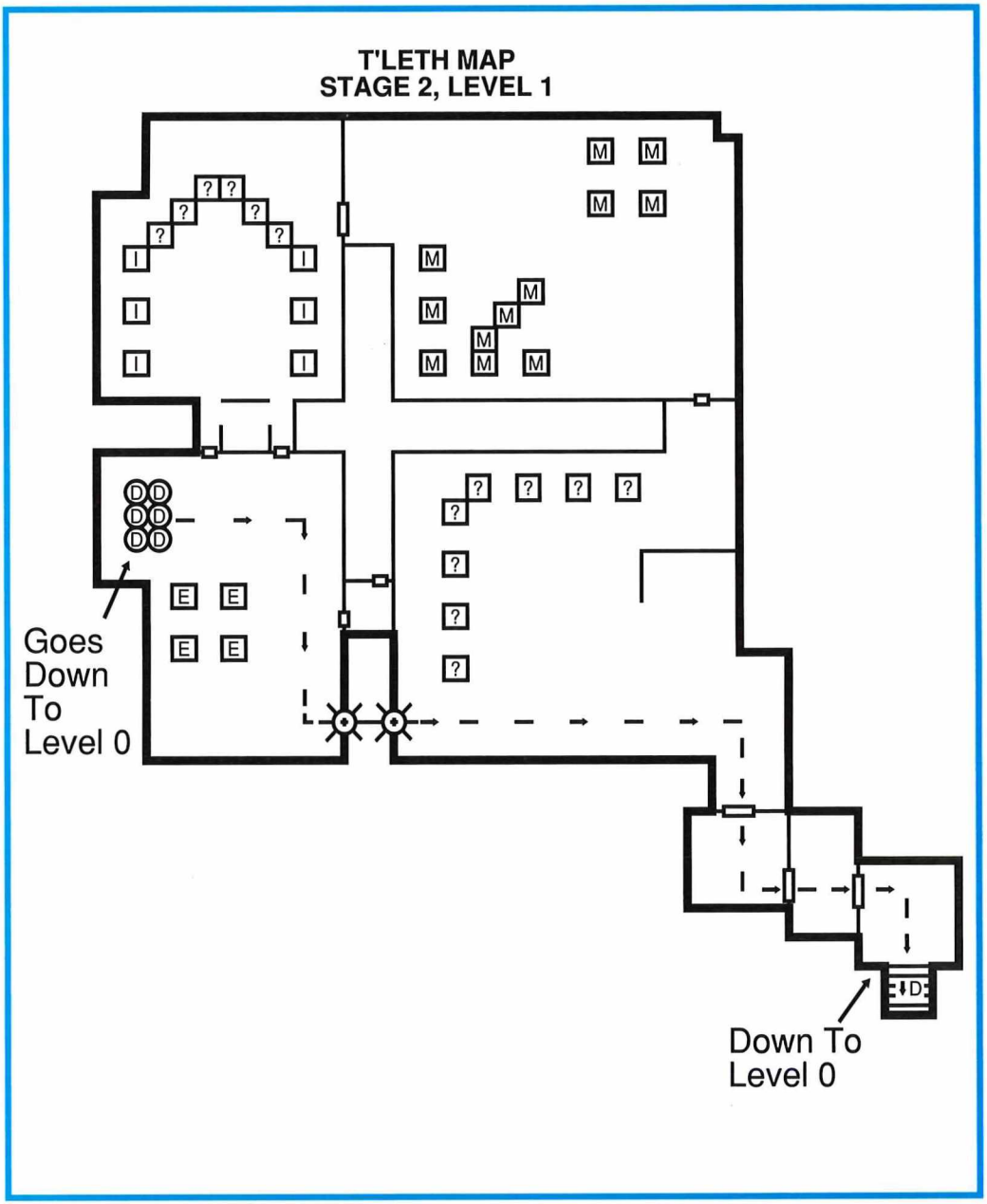


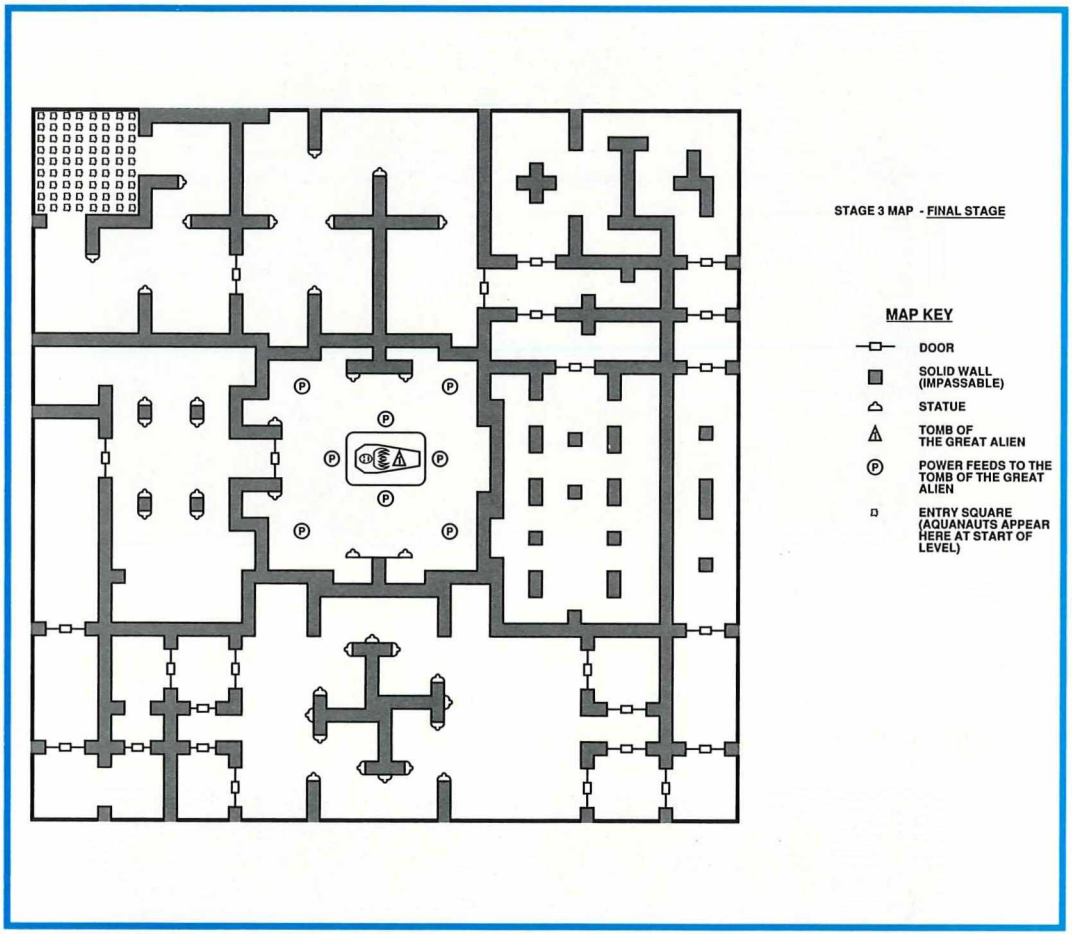
Figure 9.14. Selecting T'leth as the destination of the Leviathan.

Because T'leth is such a hazardous mission, you'll be asked to verify that you indeed want to travel to T'leth (see Figure 9.15). Click **YES** to confirm your decision.

Figure 9.15. T'leth mission confirmation.


T'LETH MAP
STAGE 2, LEVEL 0
DEPLOYMENT AREAS
Go Up To L!
Exit Area
Exit Area To Stage 3
Destroy Walls At These Locations For Fastest Route To Exit Area
Path To Take For Fastest Route To Exit Area
? Unknown Equipment
A Ion Beam Accel
I Alien Implanter
L Alien Learning Arrays
C Alien Cryogenics
CL Alien Cloning
Deployment/Exit Square


T'LETH MAP
STAGE 2, LEVEL 1
Goes Down To Level 0
Down To Level 0



Stage One

After you've viewed a short segue, you'll see the briefing screen to the first level of T'leth (see Figure 9.16).

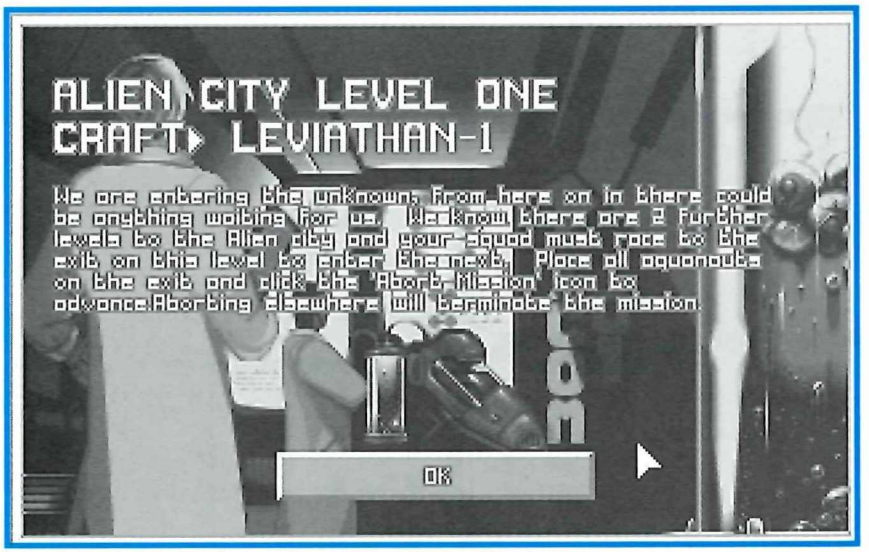


Figure 9.16. T'leth level 1 briefing screen.

Unlike alien colony and artifact site missions, you won't have to fight your way past a surface stage to enter—you'll begin the mission inside the alien city, with your soldiers deployed in the entry area of the first stage (see Figure 9.17).

Figure 9.17. Aquanauts in the initial deployment area for Stage 1.

Deployment

As mentioned previously, you'll find most of your soldiers deployed on the green entry squares of the first stage, although a few may be scattered throughout the area. At the start of your first turn, you should immediately view the overhead map to find out just exactly where all of your soldiers are located. You may want to group them into 3 fire teams of roughly 6 soldiers and SWS platforms each.

Strategy and Tactics

This stage is much like an artifact site mission: keep a sharp eye out for Tentaculats as you advance across the map. Because the narrows passageways will prevent you from using any large, rigid squad formations, you should rely on a loose, open formation in which your soldiers move slowly, watch each other's backs, and stay alert for aliens. Some of the areas on the map are perfect for ambushes, so you may want to scout the area first with an SWS platform or a molecular controlled alien (see Figure 9.18). Your goal is to reach the exit area, which is located on level 1 (the first map level above level 0) at the extreme bottom of the map (when viewed with the overhead map).

Figure 9.18. An Aquatoid Commander under molecular control.

Aliens

You'll come across a wide range of aliens in this stage: Tasoth, Hallucinoids, Aquatoids, and the infamous Tentaculats. This stage is very similar to an artifact site mission, so using the same tactics you employ there—and the general tactics in Chapter 6—should put you in good stead. Molecular control can be an invaluable asset in this stage, so use it extensively if you can.

Map Features

In addition to the large exit area at the bottom of the map, this stage may feature a large room filled with rows of alien cryogenic facilities (see Figure 9.19). Areas such as this one are havens for aliens looking to ambush your troops, so you may want to send in an SWS platform to scout the area before moving any soldier in. Better still, a Disrupter Pulse Bomb launched into the area should clean out any aliens present.

Figure 9.19. A large room in T'leth Stage 1, a favorite hang-out for reclusive aliens.

Because the first stage of T'leth seems to be randomly generated, a map is not included for that stage.

Completing the Stage

In order to complete this stage and continue on to the next level, you must move all of your soldiers to the yellow exit squares and abort the mission (see Figure 9.20). After you've done this, you'll be taken to the second stage.

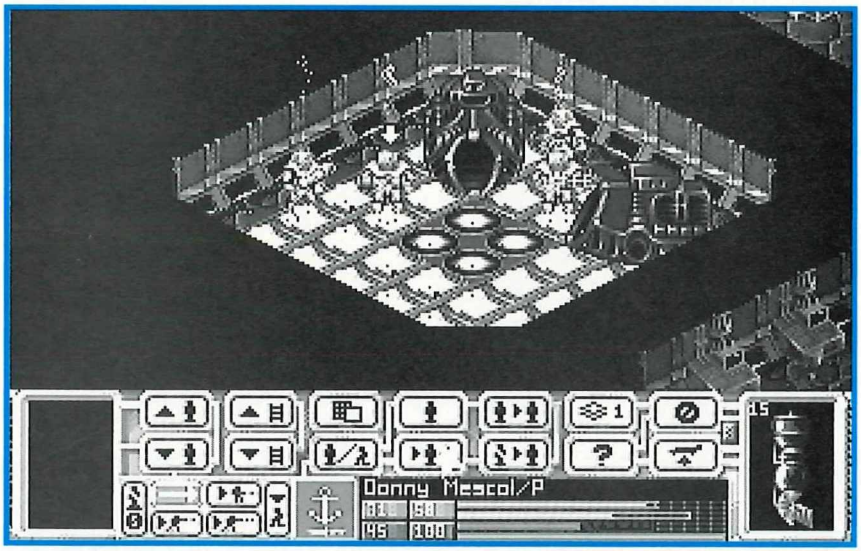


Figure 9.20. Aquanauts standing in the exit area in Stage 1 of T'leth.

Note

When you exit this stage to go to Stage 2, all the weapons and equipment that are not physically carried by an aquanaut will be left behind. Because of this, be sure to scavenge as much equipment as possible from dead aliens and aquanauts.

Stage Two

The second stage of T'leth looks remarkably like an alien colony. The most important thing to note about this level is that the exit—needed to travel to Stage 3—is in a secluded, hard-to-find spot in the lower-right corner of the map. Refer to the T'leth maps included with this chapter for details.

When you begin this stage, you're greeted with the T'leth level 2 mission briefing screen (see Figure 9.21).

Figure 9.21. T'leth level 2 briefing screen.

Deployment

As this stage begins, most of your soldiers will be deployed along the top edge of the map (when viewed using the overhead map) on two large areas of green entry squares (see Figure 9.22). Because the deployment area is in a fairly wide open area, your first task should be to get your soldiers under cover as soon as possible. Some soldiers will be randomly placed throughout the level, so one of your top priorities is to group together individual soldiers into self-supporting fire teams. When this is accomplished, you can begin moving towards the exit area in the lower-right corner of the screen.

Figure 9.22. Aquanauts standing in the entry area of T'leth level 2.

Strategy and Tactics

This is much like an alien colony, with plenty of tight, twisting passageways and rooms filled with alien equipment. All the tactics and strategies applicable to close quarters combat discussed in Chapter 6 will be especially useful here, particularly in the more cluttered areas of the map at the bottom of the screen. Don't be afraid to use Sonic Pulsers and Disrupter Pulse Bombs here: the thin walls of this stage are easily destroyed, often making the best path through this stage a destructively direct one.

Aliens

This stage houses a myriad of alien races, including Lobster Men, Aquatoids, and Hallucinoids. Most of these aliens tend to congregate in the cluttered areas in the upper-right corner of the map, so using explosive devices like Sonic Pulsers and Disrupter Bombs may be a good strategy.

Map Features

The biggest dilemma facing you in this level is reaching the exit area in the lower-right corner of the map. If you follow the structure of the map, you'll have to make your way through great lengths of alien-filled passageways and rooms. If you'd prefer to reach the exit area in this fashion, refer to the maps to this stage included in this chapter. A big disadvantage to using this strategy is that any SWS platforms accompanying you will be too large to fit through most of the narrow passageways.

An alternate strategy makes use of a Disrupter Pulse Launcher (or a few Sonic Pulsers) to blast your way through some of thin walls separating your squad from the exit area. Taking this approach will also shorten the time your soldiers are in the combat area, cutting their distance to the exit and limiting the contact they'll have with any aliens in this stage. On the maps accompanying this chapter, you'll find a dotted line that indicates this "short cut" to the exit. Crosshairs on the map indicate walls that should be destroyed with Disrupter Pulses or grenades to shorten your path.

Because you *cannot save your game* when on the third stage of T'leth, you should save your game right before you exit Stage 2.

When you exit this stage to go to Stage 3, all the weapons and equipment that are not physically carried by an aquanaut will be left behind. Because of this, be sure to scavenge as much equipment as possible from dead aliens and aquanauts.

Completing the Stage

To complete this stage, you must either kill all of the aliens present in this stage or exit by using the exit area in the lower-right corner of the map (see Figure 9.23).

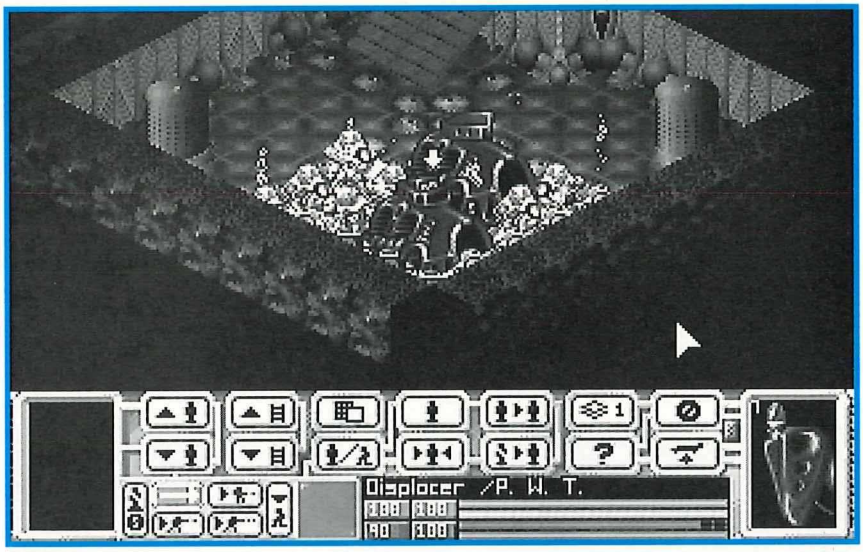


Figure 9.23. Aquanauts ready to exit T'leth Stage 2 and enter the final level.

Stage Three

After completing Stage 2, you'll be greeted by the level 3 mission briefing screen (see Figure 9.24).

Figure 9.24. T'leth level 3 mission briefing.

This is the final mission, the showdown between your aquanauts and the most deadly aliens the Great Alien can throw at you.

You *cannot save your game* when fighting in T'leth's third stage. Be sure to save your game on Stage 2 before entering this third and final stage.

Deployment

When this level begins, your aquanauts should all be grouped together on the entry squares in the upper-left corner of the map (see Figure 9.25).

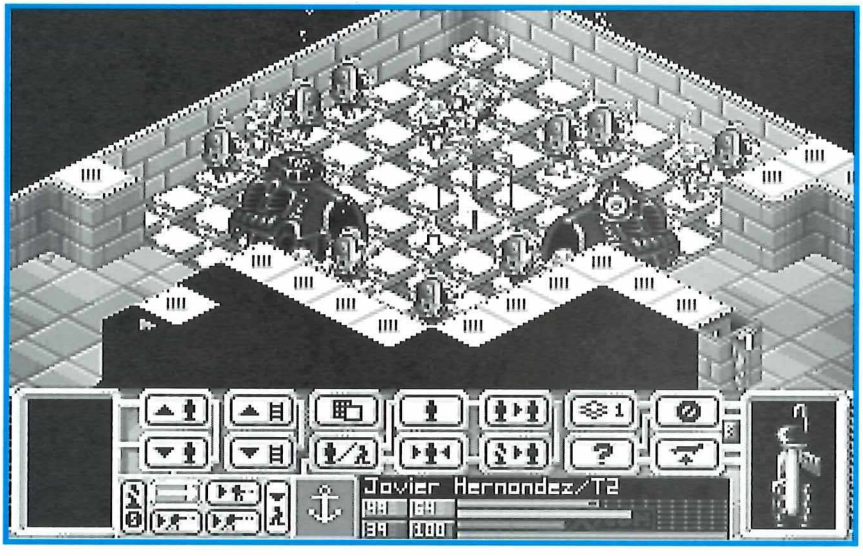


Figure 9.25. Aquanauts in the entry location to T'leth level 3.

Your first task will be to move your soldiers from the deployment area towards the right side of the map. There will usually be several Lobster Men carrying Thermal Shok Launchers just to the right of the entry area, so you may want to send out scouts or an SWS platform to investigate before sending in all of your soldiers.

Strategy and Tactics

This is the last mission of the game, so don't hold anything back. You won't confront the Great Alien in combat, so your biggest worry will be eliminating all of the guards standing between you and the tomb of the Great Alien. You won't be taking any equipment with you after this stage, so feel free to use as much destructive weaponry as possible. Unlike all the other combat missions in the game, the game cannot be saved on this level. If you fail to destroy the Great Alien in this stage, the game will end.

Aliens

You'll face just about every alien in the book in this level, so be prepared.

Map Features

The tomb of the Great Alien is in the center of the map. The only way to reach the tomb is by following the corridor which begins in the upper-right corner of the map. This corridor will take your aquanauts to the lower-right corner, the you'll move to the left into a larger, more open area. In the lower-left corner of the map, the corridor will then head back towards the original entry area. A door will be found on right hand side at the end of this corridor. Behind this door lies the tomb of the Great Alien (see Figure 9.26).

Figure 9.26. The tomb of the Great Alien.

The Great Alien

In order to destroy the Great Alien, you must systematically destroy each of the 8 power feeds that keep it alive (see Figure 9.27). To destroy these, use any weapon at your disposal, the more powerful the better. After you've destroyed all the power feeds, the game is over!

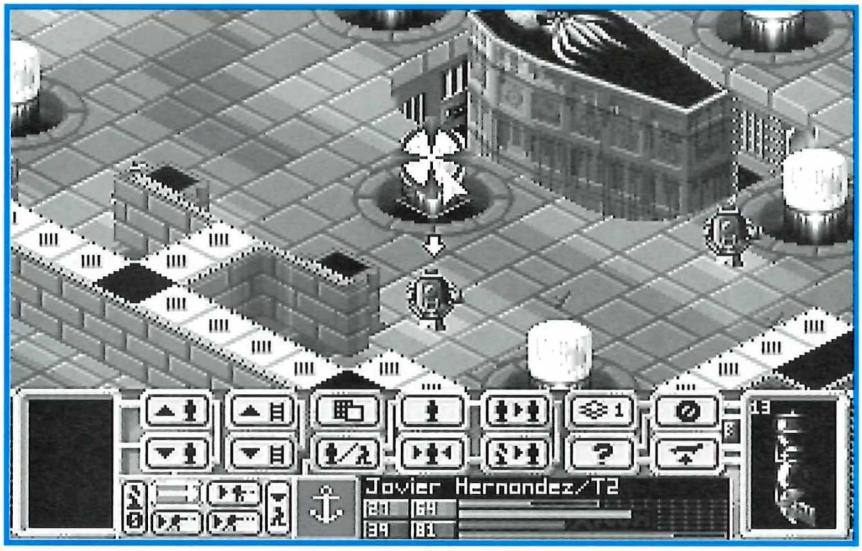


Figure 9.27. Blasting the power feeds to the tomb.

Mission Accomplished!

You've done it! After destroying all the power feeds to the tomb of the Great Alien, you'll see T'leth violently explode, thereby ending the alien menace on Earth. Or is it the end of the aliens? As the closing animation unfolds, you'll catch a brief glimpse of what the future may hold for the X-COM series (see Figure 9.28). For more information about the next game in the X-COM series—tentatively entitled *X-COM: The Apocalypse*—turn to "Inside X-COM" for an interview with the creators of X-COM.

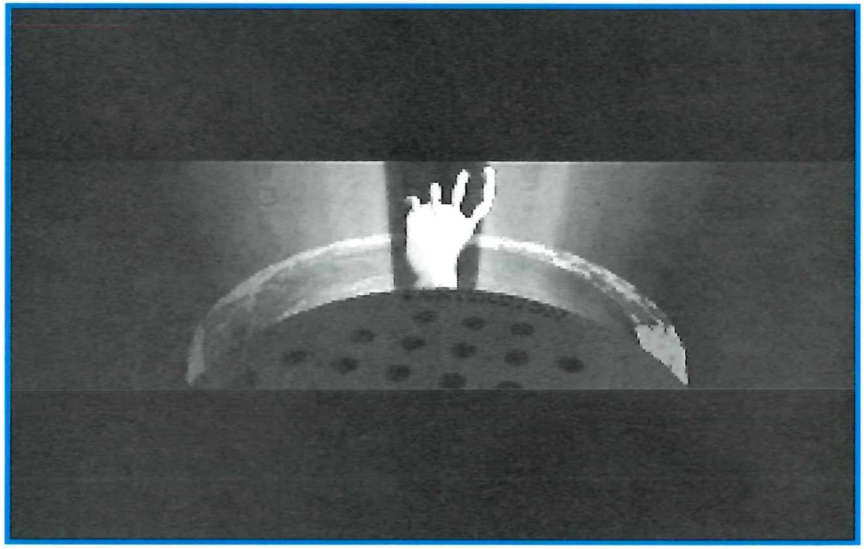


Figure 9.28. The future of X-COM?

10

Molecular Control

Of all the aspects of TFTD, perhaps none is more mysterious and misunderstood than molecular control (M.C.). If your soldiers are trained in its use, M.C. can easily become one of the most powerful—if not *the* most powerful— weapon at your disposal. Conversely, if you're not prepared to withstand M.C. attacks from aliens, you may find even the best laid battle plans crumbling into silt as your soldiers panic, go berserk, and fall under the direct control of alien forces. With that in mind, this chapter explains and describes what M.C. is, how it can be obtained, and how you can use it to defeat the aliens on the battlefield.

What Is Molecular Control?

Hidden in his ancient tomb in the murky depths of T'leth, the Great Alien bends his will towards the complete and utter domination of the human race. Key to the Great Alien's strategy is molecular control (M.C.). At its most basic level, molecular control is a form of glorified ESP that allows the Great Alien to communicate with and direct the actions of his alien henchmen across great distances. To become susceptible to M.C., an alien is implanted with a tiny molecular control device. Using these devices, the Great Alien can coordinate the actions of vast numbers of his alien minions.

In addition to serving as a vast communications network, some aliens—most notably Tasoth and Aquatoid leaders—can use their M.C. implants in combat. Using their M.C. ability as a weapon, they can affect the minds of your aquanauts and cause them to freeze in terror, run away in panic or go berserk, or attack anything within range—friend or foe. Perhaps the most insidious of M.C. attacks occurs when an alien uses molecular control to take over the mind of a weak-willed soldier. In these cases, your own aquanauts—controlled by the aliens—can turn against you and shoot your own soldiers.

Thankfully, you can protect yourself against alien M.C. attacks in a variety of ways. Perhaps the most effective strategy is to beat the aliens at their own game and acquire M.C. abilities for your own soldiers. Although M.C. ability isn't available at the outset of the game, your soldiers can eventually be trained in its use. Central to aquanauts using molecular control are the following two ability scores: molecular control strength (M.C. Strength) and molecular control skill (M.C. Skill).

Does molecular control sound familiar? If you've played the original X-COM, you'll notice that molecular control has a great deal in common with psionics. Although the steps required to obtain M.C. are a bit different than psionics, you can still use most of the same strategies and tactics that were proven successful in the first X-COM using psionics. Some of these tactics are explained as follows.

M.C. Ability Scores

Just like any other ability, aquanauts are given numerical ratings in the categories of M.C. Strength and M.C. Skill. Unlike other abilities, these scores are hidden from view until a soldier has completed a month of training in an M.C. lab. Like other ability scores, the higher the value the better.

Molecular Control Strength (M.C. Strength)

M.C. Strength can be best described as a soldier's natural ability to defend against enemy M.C. attacks. M.C. Strength is also used to rate a soldier's ability to engage in M.C. combat. A higher M.C. Strength provides two important benefits: it makes a soldier more resistant to the effects of M.C. attacks from aliens, and it makes him more effective when attacking aliens with M.C. Unlike most other ability scores, M.C. Strength *never* increases. This makes sacking soldiers with low M.C. scores a crucial part of your combat strategy.

Molecular Control Skill (M.C. Skill)

Whereas M.C. Strength indicates an aquanaut's natural M.C. ability, M.C. Skill reflects an aquanaut's skill at using M.C. devices in combat. Unlike M.C. Strength, M.C. Skill can be increased. It can be improved in the following two ways:

- Using molecular control in combat.
- By participating in monthly training at an M.C. Lab.

M.C. Skill can (and frequently does) go above a score of 100.

Getting M.C. Ability

To get M.C. ability for your soldiers, you must successfully complete the following three steps.

1. You must research the correct aliens and alien technologies.
2. You must build a molecular control lab with which to train your soldiers in the use of M.C. devices.
3. You must build or acquire the M.C. devices necessary to use M.C. in combat.

Research Path

Your first step is to research the correct aliens and alien technologies. Figure 10.1 is an excerpt from the research tree that applies directly to M.C. combat. (For more information on research, see Chapter 3, "Money, Manufacturing, and Research.")

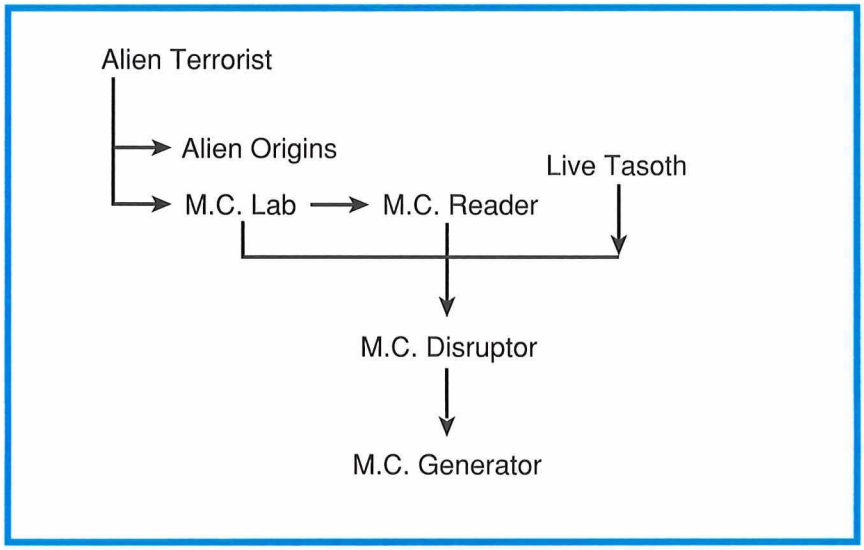


Figure 10.1. Molecular Control research tree.

Note If you've successfully researched the M.C. Lab but do not have an M.C. Reader in stock, you won't be able to research the M.C. Reader—*ever*. Even if you capture and research another Deep One and later acquire an M.C. Reader, you still won't be able to research the M.C. Reader.

Because successful research of an M.C. Reader is a prerequisite to the M.C. Disrupter, this will prevent you from getting that device as well. Your only course of action is to revert to an old saved game that precedes the completion of your research on the M.C. Lab, stop the research, and then try to obtain an M.C. Reader from an alien crash site or colony. As of this writing, MicroProse is planning a minor update to TFTD that will fix this research problem. See Chapter 12, "Troubleshooting," for more information.

Building an M.C. Lab

After your scientists have successfully researched the M.C. Lab, you can build one at any of your X-COM bases. M.C. Labs are expensive and take a considerable amount of time to build (see Table 10.2), so you must budget your time and resources wisely to build one. It's usually a good idea to build an M.C. Lab in each base that regularly houses more than ten soldiers.

It's a good idea to plan the construction of an M.C. Lab so that it can be completed close to the end of a month. Because a lab takes 24 days to build, you should begin construction no later than the 4th or 5th day of the month. If you begin construction any later you won't be able to train your soldiers at the end of the month; you must wait until the end of the next month to enroll them in the training program.

Acquiring/Manufacturing M.C. Devices

To use molecular control in combat against the aliens, your soldiers must make use of the M.C. Disrupter. Unlike the M.C. Reader—which can be recovered from alien crash sites, bases, and other areas—the M.C. Disrupter *must* be manufactured at one of your bases. Any of your soldiers can use an M.C. Reader, while only aquanauts with an M.C. Skill higher than 0 are allowed to use the M.C. Disrupter.

Using the M.C. Lab

After you've completed construction of an M.C. Lab, you can use it to train your aquanauts in M.C. combat. Each M.C. Lab can train up to ten soldiers at a time.

M.C. Enrollment

At the end of each month, each X-COM base that contains a completed M.C. Lab is listed on the Molecular Control Training main menu (see Figure 10.2). To look at the soldiers enrolled at each base, click on the button corresponding to that base. A new screen appears (see Figure 10.3) which shows specific information on each soldier enrolled in the program.

Figure 10.2. Molecular Control Training main menu.

M.C. Training

The Molecular Control Training detail screen provides a wealth of important information about the progress your aquanauts are making in honing their molecular control skills. At the top of this screen are the following four column headings: Name, M.C. Strength, M.C. Skill/Improvement, and In Training.

The first two columns are self-explanatory, while the M.C. Skill/Improvement displays an aquanaut's current M.C. Skill and the amount that skill has increased since the current month's training began. Finally, the In Training column indicates whether or not a soldier is currently enrolled in the M.C. Lab.

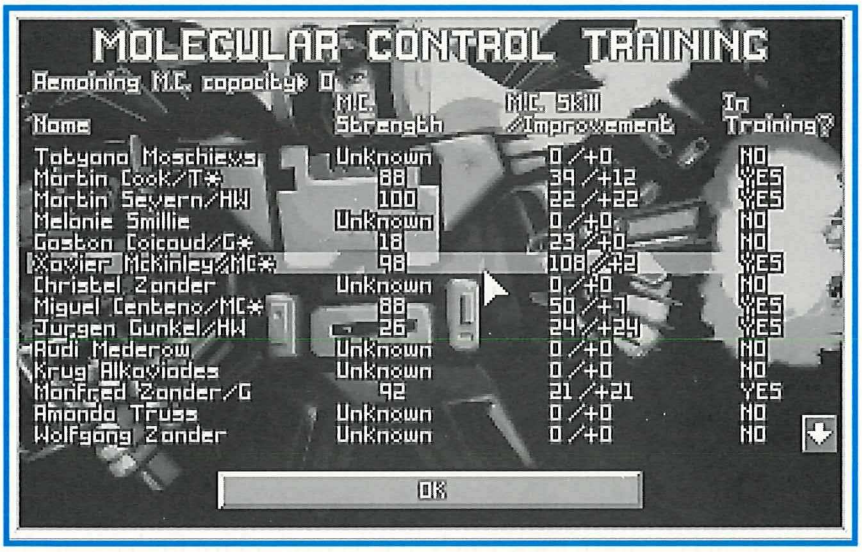


Figure 10.3. Molecular Control Training aquanaut detail screen.

M.C. Screening Process

Just as you should have ability score minimums for most soldier ability scores, it's important to have ability score minimums for molecular control abilities. In many respects, molecular control ability scores are more important than most ability scores, particularly M.C. Strength. Soldiers with low M.C. Strength are more than just under-performers—they can be turned against you in combat when you're fighting a group of M.C.-capable aliens. For that reason, it's vital that you employ an efficient system to screen out soldiers with weak M.C. Strength as soon as possible.

After a soldier has undergone at least one month of training in an M.C. Lab, his M.C. Strength and skill scores will appear. When this occurs, you can determine whether the soldier should be sacked, removed from training, or promoted to one of the most privileged positions in the X-COM military—the M.C. specialist. A variety of screening systems can be used, although I've found the one listed in Table 10.1 to be quite effective.

Table 10.1. Screening Aquanauts.

Aquanaut M.C. Strength	Action Taken
0-59	Sack aquanaut immediately
60-89	Keep aquanaut, but remove him from M.C. training
90+	Keep aquanaut in training and make him an M.C. specialist

By using the data shown in Table 10.1, you can see that aquanauts with an M.C. Strength lower than 60 should be sacked immediately and replaced with a fresh recruit. These soldiers are simply too susceptible to M.C. control to be effective during combat.

Soldiers with M.C. Strength between 60 and 90 should be removed from training in the M.C. Lab. Although these soldiers have acceptable M.C. Strength ratings—enough to make them resistant to alien M.C. attacks—their M.C. Strength isn't high enough for them to be exceptionally effective as M.C. specialists.

Finally, aquanauts with an M.C. Strength of 90 or higher should immediately be promoted to M.C. specialists. A high M.C. Strength is vital to using molecular control on M.C.-resistant aliens, and because M.C. Strength can never be increased, you should only make the most gifted of your soldiers M.C. specialists.

Aquanauts with an M.C. Strength between 50 and 90 may be able to take up the slack if you're short on soldiers with high (90+) M.C. Strength, but they will have a tough time controlling M.C. resistant aliens (such as the dreaded Tentaculat) and may need to make repeated attempts when trying to control even rank and file aliens with weak M.C. Strengths. One M.C. specialist with high M.C. Strength and Skill ratings (preferably above 90 in each category) will almost always be more successful than even 2–3 less skilled aquanauts.

M.C. Specialists

Just like any other soldier specialization, an M.C. specialist requires certain ability score prerequisites. (For more information on soldier specialization, see Chapter 5, "Aquanauts.") The aquanaut in Figure 10.4 is an excellent example of an M.C. specialist, with very high M.C. Strength and M.C. Skill ability scores.

Molecular Controller (M.C.)

Prerequisites

Normal ability score minimums, plus:

Time units: 50+

Molecular control strength: 90+

Molecular control skill: 25+

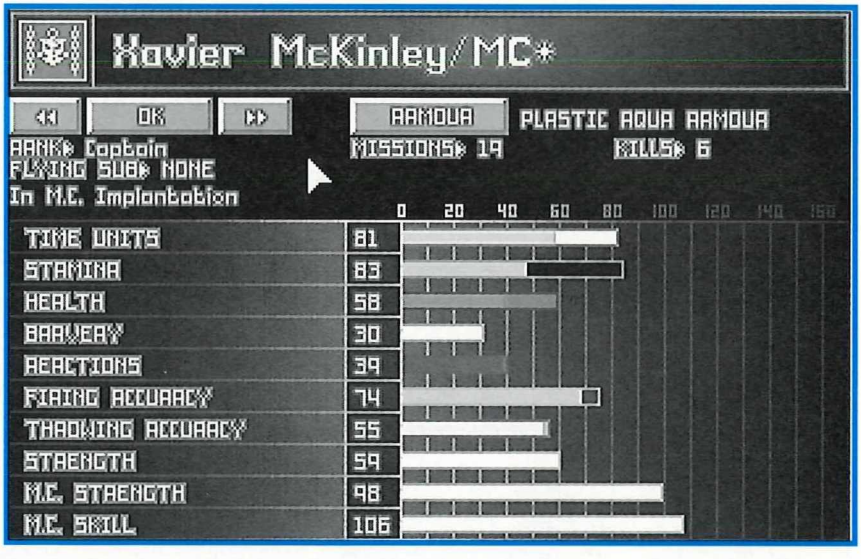


Figure 10.4. Molecular control specialist.

The primary role of the M.C. specialist is to attack aliens using molecular control—all other tasks should be relegated to secondary importance. For that reason, you should equip an M.C. specialist with an M.C. Disruptor in one hand and either an M.C. Reader or a sonic pistol in the other. And because M.C. combat can occur across great distances, I usually leave M.C. specialists far to the rear of the combat area. It's important that they remain inside transports, hidden behind a solid object, or trail to the rear of your advancing squad. These soldiers are simply too valuable to risk in direct combat with the enemy, so it pays to keep them out of harm's way.

It also helps to have high-ranking M.C. specialists (with the rank of Lieutenant and above), because they also provide a large boost in morale to other soldiers on the battlefield. You should move your M.C. specialists out of hiding only when you're sure the area is secure and/or you need to travel to the next level in a multi-part mission (such as in an alien colony or artifact site).

M.C. Equipment

M.C. Lab

The M.C. Lab is used to train up to ten aquanauts each month in the use of molecular control. Aquanauts can only be added to or removed from training at the M.C. Lab at the end of the month.

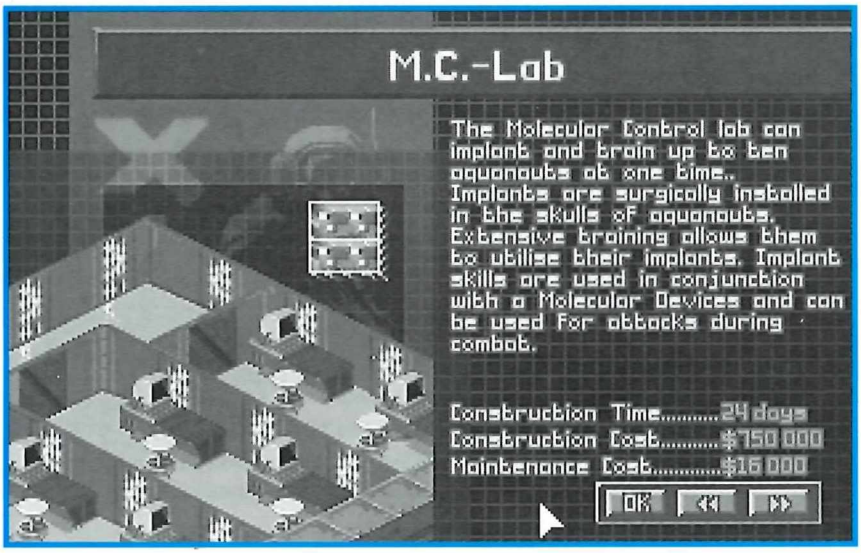


Figure 10.5. Molecular Control Lab.

Although each M.C. Lab can hold only ten aquanauts, you can build more than one M.C. Lab at each base, thereby increasing your monthly M.C. training capacity. This is especially helpful if only one or two bases house the bulk of your soldiers. For example, a base with three M.C. Labs would be able to train 30 aquanauts each month in the use of molecular control.

M.C. Generator

The M.C. Generator can best be thought of as a sort of cloaking device that shields your base from detection (see Figure 10.6). Aliens will often use molecular control to search for hidden X-COM bases. The M.C. Generator shields your base from detection and increases the chance that your base is not discovered and attacked by aliens.

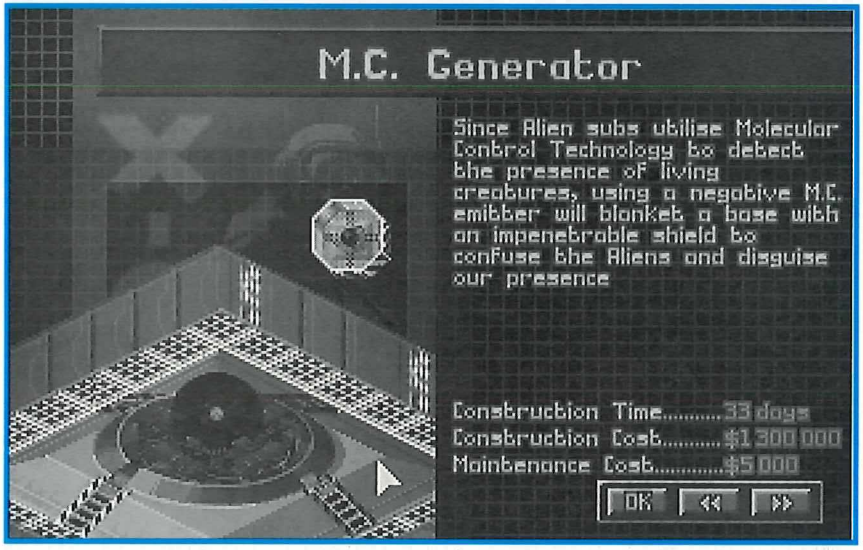


Figure 10.6. Molecular Control Generator.

M.C. Reader

The M.C. Reader lets you analyze the ability score statistics of any alien within range (see Figure 10.7). It also tells you the race and the rank of the alien you examine. For example, the M.C. Reader can tell you if the live Aquatoid alien you are facing is an "Aquatoid Soldier" or an "Aquatoid Medic."

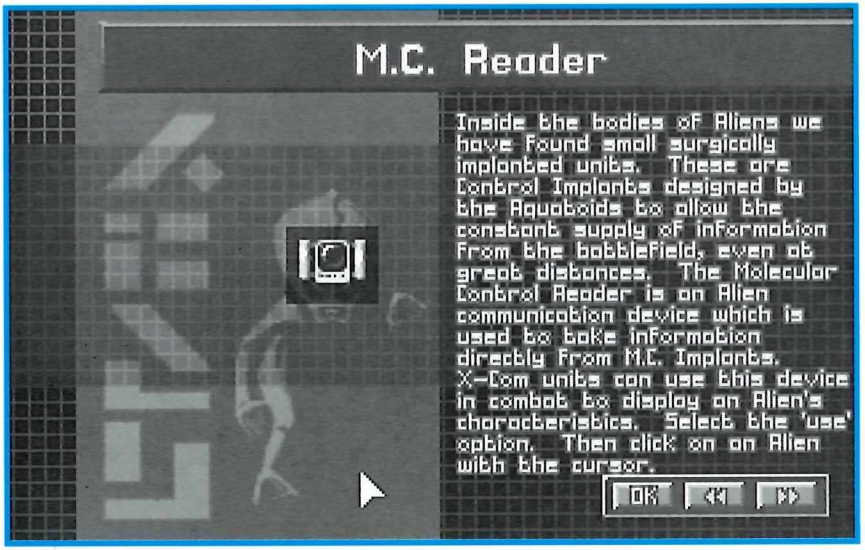


Figure 10.7. Molecular Control Reader.

M.C. Disrupter

The M.C. Disrupter is vital if you plan to use M.C. in combat against the aliens. The Disrupter acts as an M.C. focusing device, and concentrates enough M.C. energy to allow skilled soldiers to attack aliens in combat. The Disrupter lets you panic the aliens (JAM IMPLANT) or assume direct control over them (CONTROL IMPLANT) (see Figure 10.8).

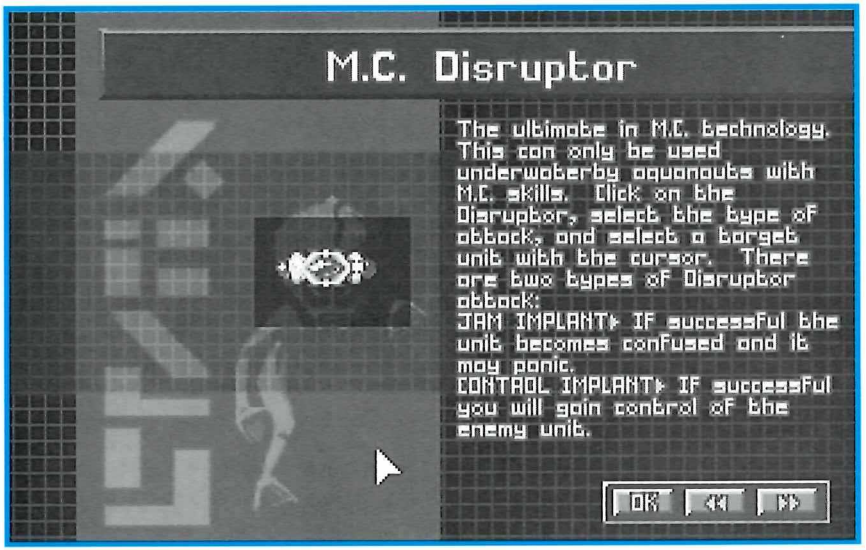


Figure 10.8. Molecular Control Disrupter.

Table 10.2. Molecular Control Item/Facility Summary.

Item	Cost	Space	Materials	Time	Maint.	Notes
M.C. Lab	$750,000	N/A	None	24d	$16,000	Trains aquanauts in molecular control.
M.C. Generator	$1,300,000	N/A	None	33d	$5,000	Makes base harder to find.
M.C. Reader	$262,000	4	1Zr/1 AquaPl	1200h	N/A	Displays alien ability scores in combat.
M.C. Disrupter	$160,000	4	2Zr/1 AquaPl	500h	N/A	Used for M.C. attacks in combat.

Cost—The cost required to manufacture and construct one item/facility.

Space—The workspace required to build the item. (M.C. Disrupter and M.C. Reader only.)

Materials—Any special materials the item needs for construction. (M.C. Disrupter and M.C. Reader only.)

Time—The time required to build the item. (Listed in engineer-hours for M.C. Disrupter and M.C. Reader, days for M.C. Generator and M.C. Lab.)

Maintenance—The monthly maintenance cost of the facility. (M.C. Generator and M.C. Lab only.)

Aliens and Molecular Control

Just like your own troopers, aliens possess widely varying degrees of M.C. Strength and Skill. For the sake of comparison, examine the alien M.C. Strength and M.C. Skill statistics listed in Table 10.3.

Table 10.3. Alien M.C. Strength and Skill Scores.

Name/Rank	M.C. Skill	M.C. Strength	M.C. Resistance	M.C. Attack?
Aquatoid/Medic	0	35	Low	No
Aquatoid/ Navigator	30	45	Average	Yes

Name/Rank	M.C. Skill	M.C. Strength	M.C. Resistance	M.C. Attack?
Aquatoid/ Soldier	0	30	Low	No
Aquatoid/ Squad Leader	0	30	Low	No
Aquatoid/ Technician	25	40	Low	Yes
Aquatoid/ Commander	50	50	Average	Yes
Gill Man/ Commander	50	40	Low	Yes
Gill Man/ Soldier	0	20	Poor	No
Gill Man/ Squad Leader	0	25	Low	No
Gill Man/ Technician	0	25	Low	No
Lobster Man/ Commander	0	50	Average	No
Lobster Man/ Navigator	0	45	Average	No
Lobster Man/ Squad Leader	0	30	Low	No
Lobster Man/ Technician	0	35	Low	No
Lobster Man/ Soldier	0	25	Low	No
Tasoth/ Soldier	0	30	Low	No
Tasoth/ Squad Leader	40	50	Average	Yes

Name/Rank	M.C. Skill	M.C. Strength	M.C. Resistance	M.C. Attack?
Bio-Drone	0	90	Very Good	No
Calcinite	0	90	Very Good	No
Deep One	0	40	Low	No
Hallucinoid	0	60	Good	No
Tentaculat	0	100	Excellent	No
Triscene	0	60	Good	No
Xarquid	0	80	Very Good	No
Zombie	0	90	Very Good	No
Civilian	0	5	Poor	No
Coelacanth (Any)	0	100	Immune	No
Displacer (Any)	0	100	Immune	No

Name/Rank—Alien species and rank.

M.C. Skill—Molecular control skill rating.

M.C. Strength—Molecular control strength rating.

M.C. Resistance—Alien's ability to resist a molecular control attack.

M.C. Attack—Yes: Alien can perform M.C. attacks. No: Alien cannot perform M.C. attacks.

Alien ability scores are based on the "beginner" difficulty setting.

Molecular Control and Combat

Unlike aliens, who don't need an M.C. Disrupter to attack with molecular control, your aquanauts must rely on the M.C. Disrupter for M.C. combat. In addition to the M.C. Disrupter, your aquanauts may need the abilities of the M.C. Reader.

Using the M.C. Reader

To use an M.C. Reader in combat, select the **M.C. Reader** by clicking on it, just as you would to activate a weapon carried by an aquanaut. Upon doing so, the M.C. Reader action menu appears (see Figure 10.9).

Figure 10.9. M.C. Reader action menu.

Selecting the **USE M.C. READER** option exits the M.C. Reader action menu and replaces your mouse pointer with a rectangular cursor topped by a flashing icon symbolizing molecular control. Simply move the cursor until it rests on an alien (it should begin flashing yellow when correctly positioned) and press the left mouse button. An alien data screen appears (see Figure 10.10) listing the characteristics and ability scores of the alien in question. To return to the battlescape, click the left mouse button.

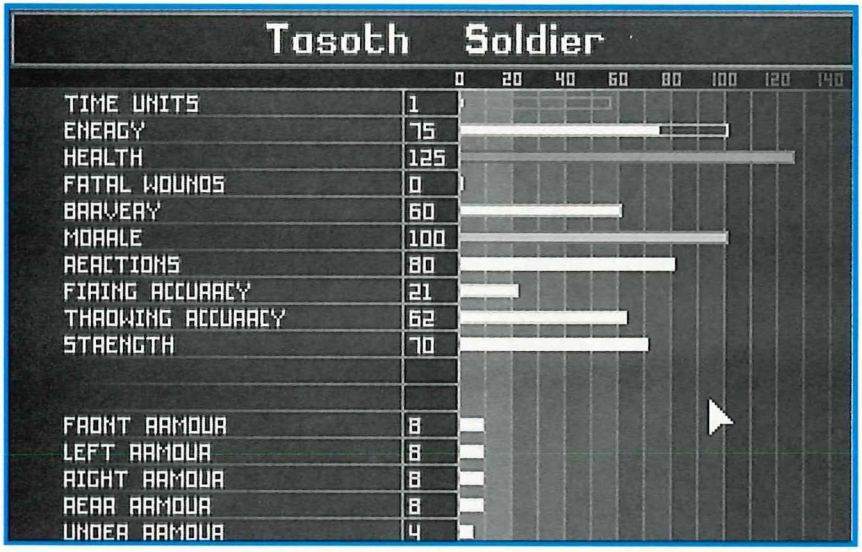


Figure 10.10. Alien characteristics data screen.

The M.C. Reader is especially useful when you're trying to capture high-ranking alien leaders. Instead of stunning every alien you meet, you can pinpoint your targets and go after them exclusively.

Using the M.C. Disrupter

Like the M.C. Reader, the M.C. Disrupter must be placed in an aquanaut's hand to be used. To use an M.C. Disrupter in combat, simply select the M.C. Disrupter by clicking on it. Upon doing so, the M.C. Disrupter action menu appears (see Figure 10.11).

Figure 10.11. M.C. Disrupter action menu.

In addition to the ubiquitous THROW menu option, there are two others: JAM IMPLANT and MOLECULAR CONTROL. Both options require 25 TUs to activate.

Jam Implant

Selecting the **JAM IMPLANT** option exits the M.C. Disrupter action menu and returns you to the battlescape, replacing your mouse pointer with a rectangular cursor topped by a flashing icon symbolizing molecular control. Simply move the cursor until it rests on an alien (it should begin flashing yellow when correctly positioned) and press the left mouse button. The alien's M.C. Strength is then compared to the M.C. Strength of the attacking aquanaut (M.C. Skill also plays a role). If successful, the alien panics, flees, or goes berserk.

Molecular Control

Selecting the **MOLECULAR CONTROL** option exits the M.C. Disrupter action menu and returns you to the battlescape. It replaces your mouse pointer with a rectangular cursor topped by a flashing icon that symbolizes molecular control. Simply move the cursor until it rests on an alien (it should begin flashing yellow when correctly positioned) and press the left mouse button.

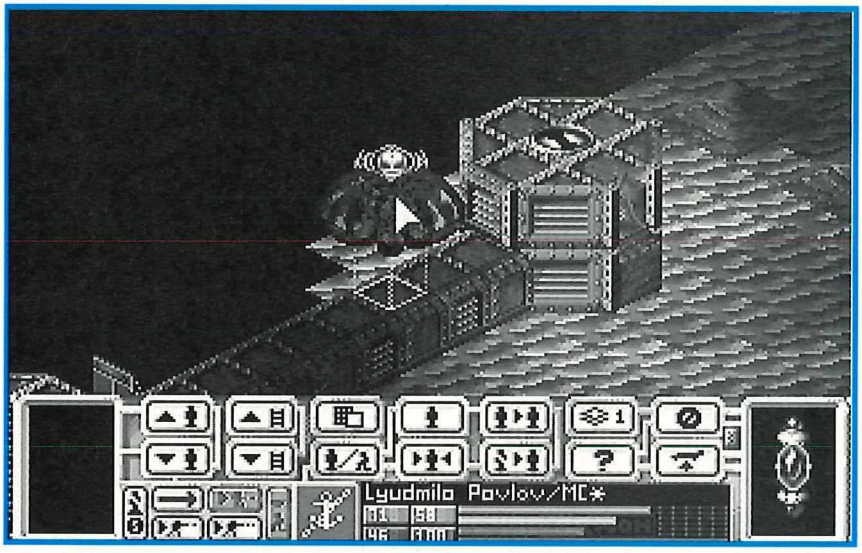


Figure 10.12. An M.C. Disrupter attempt performed on a Hallucinoid.

After the left mouse button is pressed, an attempt is made to gain control of the targeted alien. The success of your attack is based upon the M.C. Strength and Skill of the attacking aquanaut compared to the same abilities of the target alien. If the molecular control attempt is unsuccessful, nothing happens. If you have enough TUs to launch more attempts to control the alien, you may do so. If you are successful at controlling an alien, a message stating "Implant Control Successful" appears (see Figure 10.13).

Figure 10.13. M.C. Disrupter Implant Control Successful.

When the alien is under your control, you can use that alien just like you would any other member of your combat squad, with a few notable exceptions.

Aliens under molecular control *can* perform the following:

- Move
- Fire weapons or use objects present in either hand
- Throw weapons and objects present in either hand

Aliens under molecular control *cannot* perform the following:

- Access their inventory
- Re-load weapons

In addition, the effects of molecular control only last for one turn. To maintain molecular control over an alien, you must attack that alien every new turn to regain control.

M.C. Combat Strategies: Offensive

Listed below are a few combat strategies useful against the aliens when you have molecular control ability.

Elimination

Elimination is the simplest strategy. You can employ it by using an M.C. Disrupter, gaining control of an alien, and then making it move towards a waiting trooper. When the alien gets close enough to your soldiers, order them to fire upon and kill the alien.

Capture

One of the best methods for using molecular control is the capture of live aliens. Using an M.C. Reader to identify aliens as you spot them, you should be able to locate a high-ranking alien officer, such as a commander or navigator. After you've determined the identity of the alien, use an M.C. Disrupter to control the alien and move it close to you. Then make the alien move towards a team of aquanauts equipped with Thermal Tazers and Thermal Shok Launchers. Wait one turn for the alien to revert back to normal, and then stun it.

Aliens that are molecular controlled and then stunned do *not* count as being captured alive. To successfully capture molecular controlled aliens, you must wait one turn (to revert to "alien" normal state) and then stun them with a Thermal Tazer or a Thermal Shok Bomb.

Scouts

Some aliens make excellent disposable scouts, who are perfect for locating hostile aliens who may be hiding behind dense areas or lurking around cluttered city streets. Of all alien types, the Tentaculat and Bio-Drone make the best scouts. Because of their high allotment of Time Units (TUs), these aliens can cover vast tracts of hostile territory. However, the Tentaculat is difficult to get under molecular control (see Figure 10.14).

Figure 10.14. A molecular controlled Tentaculat used as a scout.

Point Men

Instead of using your own valuable troopers as point men, you can enlist the services of a molecular controlled alien (see Figure 10.15). Any aliens you encounter usually fire upon their turncoat comrade first, which protects your troopers from harm.

Figure 10.15. Aquatoid used as a point man.

It's usually a good idea to expend a molecular controlled alien's allotment of TUs. Remember that the alien reverts to alien control on the next turn, so if the alien has enough TUs and energy left, it may attempt to flee or fire upon your soldiers.

Free Ammunition

In some missions—particularly two-stage missions like artifact sites and alien colonies—running out of ammunition can be a real problem. The answer to this ammunition shortage may be closer than you think. Instead of killing aliens outright, you can molecular control them. After you have control, simply make the alien throw a weapon to you. Now you can pick up the alien's weapon and unload the ammunition; you can even dispatch the alien with the assistance of his ammo.

Assassins

Some aliens are so tough and deadly that they make invaluable additions to your X-COM squad when they have been molecular controlled. Lobster Men can be particularly tough against other aliens, because their tough exoskeletons prevent them from taking most damage. Bio-Drones are also useful, but their bothersome tendency to explode when fired upon can endanger other members of your squad. For that reason Bio-Drones make excellent "Kamikaze" troopers. Simply charge them towards the largest group of aliens and hope they destroy the attacker.

The undisputed favorite choice of most TFTD commanders is undoubtedly the Triscene. Blessed with a thick hide, a powerful sonic cannon, and gobs of health and stamina points, this massive monster (it occupies four squares on the battlescape) can be used much like an SWS platform, absorbing and meting out vast amounts of punishment.

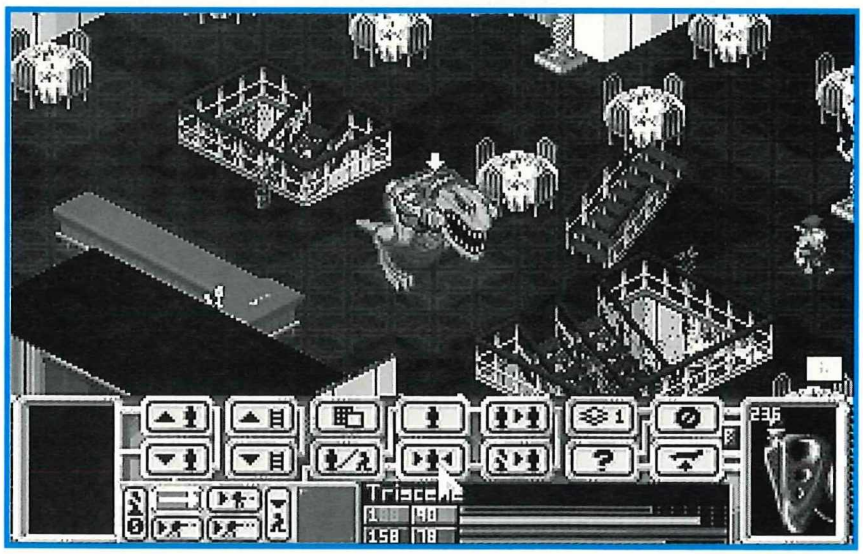


Figure 10.16. A molecular controlled Triscene.

When you're controlling civilians or zombies, they face the opposite direction they travel. In other words, if you make a zombie turn to face you, you'll see his back.

Don't use M.C. on civilians! After they've been controlled once, they switch to the alien side, moving alongside their alien attackers. Because these traitorous civilians count as aliens for the purposes of finishing the combat, you must stun or kill them to proceed.

Daisy Chain

This strategy can be especially effective if you have several M.C. specialists at your disposal. In Daisy Chain strategy, you move your own soldiers normally until an alien is spotted. After the alien is spotted, use an M.C. specialist to molecular control it. Take control of the alien and move into unexplored territory. Ideally, the first controlled alien will spot another alien (use an M.C. specialist to control the newly discovered alien). Take control of the next alien, and then send it out looking for yet more aliens.

In this fashion you can scout out vast tracts of the battlescape screen with zero risk to your own soldiers. This also works well with the "elimination" strategy described later. Find, control, and group all the aliens together, and then use a sonic pulser or pulse launcher to finish off the massed aliens in one fell swoop.

Panic

Instead of controlling aliens, you can use the JAM IMPLANT option of the M.C. Disruptor to cause the aliens to panic, go berserk, or drop their weapons. Panicked aliens drop their weapons (just as panicked aquanauts do); however, aliens may still use other weapons they may be carrying (most notably grenades) or their own natural hand-to-hand attacks.

Stunned aliens generally do not pick up weapons that they have dropped. You can use this to your advantage in combat. Control an alien and then make it drop its weapon (by throwing it). Unless you control the alien again on the next turn, the alien reverts back to alien control, but now without a weapon. This works best against aliens that do not have the ability to launch molecular control attacks of their own, such as Tasoth and Aquatoid leaders.

Shepherd

A popular molecular control combat strategy is to use a Coelacanth or Displacer SWS platform as a "shepherd" for controlled aliens. Using the SWS as a scout, you control every alien that the SWS encounters, and then make it walk next to the SWS. You continue in this manner with each alien you encounter until the SWS is surrounded by obedient, controlled aliens. If an enemy alien tries to fire at your SWS platform, he'll most likely hit one of the aliens instead. If a controlled alien reverts to alien control and tries to flee, the SWS shoots it. And because SWS platforms are immune to molecular control, you never need worry about losing it to the aliens.

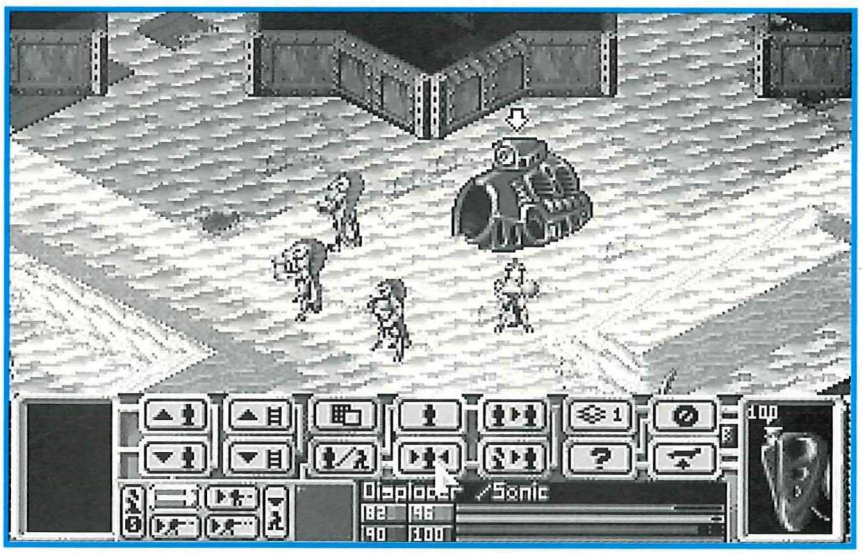


Figure 10.17. A Displacer "shepherding" a group of aliens.

The likelihood of an M.C. attack being successful decreases slightly over distance. That's why it's important to have M.C. specialists with the highest possible M.C. Strength and M.C. Skill scores to better compensate for the minor reduction in attack probability.

M.C. Combat Strategies: Defensive

Whenever an alien attempts to affect one of your aquanauts with molecular control, the screen centers on the affected soldier and a yellow flash briefly appears on the solider. If the alien attack was successful, a screen appears which may state something like "BERNARD REVENU IS UNDER ALIEN CONTROL" or "BERNARD REVENU HAS GONE BERSERK." If a solider is repeatedly controlled or panicked by alien M.C. attacks, chances are that the soldier has a low M.C. Strength rating. Sack the soldier at the first available opportunity. Listed below are some defensive strategies for combating aliens with M.C. ability.

Dealing with Molecular Controlled Aquanauts

Perhaps nothing is worse than having your best soldier controlled by the aliens and used against you. How do you deal with molecular controlled aquanauts? If a soldier is at the receiving end of a large number of M.C. attacks, you should first make the soldier drop his weapons at the first available opportunity. If a soldier remains under molecular control, you should stun him with a Thermal Tazer or Thermal Shok Bomb. Finally, as a last resort, you may need to shoot the molecular controlled soldier.

In addition to having a high M.C. Strength, a high bravery rating can also help your soldiers resist M.C. attacks. Although a high M.C. Strength is still the most important attribute, a high bravery rating makes your aquanauts more resistant to the alien JAM IMPLANT attacks that cause panic and berserk behavior.

Using SWS Platforms

Unlike aquanauts, SWS platforms are *totally immune* to alien M.C. attempts. If you're facing a batch of aliens that have M.C. ability, an extra SWS platform—especially a displacer—can mean the difference between life and death.

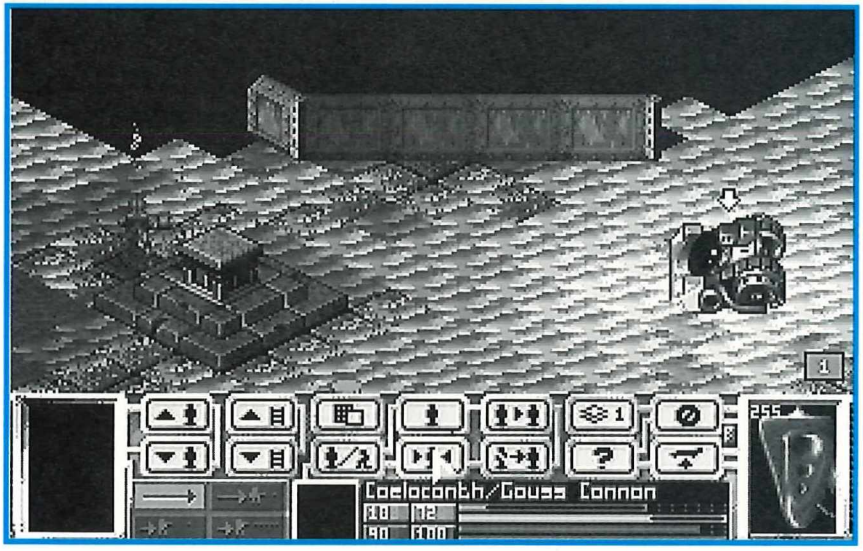


Figure 10.18. An SWS platform.

Eliminating the Threat

If you're facing M.C.-savvy aliens without M.C. attacks of your own, the best strategy is an aggressive attack. The faster you kill the aliens, the less time they have to conduct M.C. attacks on your soldiers. The more aliens you kill, the lower their morale becomes, which increases the chance that *they* panic and flee.

After you've successfully controlled a large alien such as a Triscene, Hallucinoid, or Xarquid, you may see a target identifier appear. If you click on this identifier, it centers the screen on the molecular controlled alien! Although the alien is under your control, a programming glitch in the game causes the alien to view parts of itself as the enemy. Whatever you do, don't shoot at the alien part; you'll only kill it in the process. It's simply a harmless, but irksome, programming bug.

Aliens do not need to maintain line of sight (LOS) in order to conduct molecular control attacks. So no matter how well your soldiers are hidden, an M.C.-capable alien can find them!

Puppets

Aliens tend to attack soldiers with the lowest M.C. Strengths. Knowing this, you can take along one or two soldiers with extremely low M.C. Strength scores on every mission. Don't give them any weapons, armor, or equipment at all—just keep them back on your transport. The aliens will usually spend all of their time attempting to control these soldiers, leaving the rest of your troopers alone.

11

Game Resources

Like many other popular computer games such as DOOM, X-Wing, and the original X-COM, TFTD has been blessed with a surplus of third-party game cheats, hints, utilities, and FAQ files. If you're stuck on a certain level or mission, nearly all of the major on-line services offer areas where gamers can meet on-line and swap stories, hints, and game-winning information. In this chapter, we'll take a look at all the extra resources available to the TFTD gamer. From cheat files to books on tactics and strategy, this chapter should provide you with all the information you need to maximize your enjoyment of TFTD.

Finding Files and FAQs

Most of the files mentioned in this chapter can be found on the major on-line services, including GEnie, CompuServe, and America Online. In addition, this chapter lists several alternate sources for TFTD cheats and utilities, ranging from small bulletin board systems (BBSs) to sites on the World Wide Web (WWW). Most on-line services and BBSs have powerful search programs to help you find what you're looking for. When searching for TFTD utilities, using the keywords X-COM, X-COM2, TFTD and UFO should help point you in the right direction.

Using the Internet

Some of the files and services mentioned in this chapter can only be reached by accessing the Internet directly. Unlike using the major commercial on-line services—such as CompuServe and America Online—navigating the Internet can be a bewildering experience if you're not that familiar with how the Internet works and the best ways to find information. If you're an Internet neophyte, you'd be well advised to obtain TFTD cheats and utilities from commercial on-line services or local BBSs.

Shareware Game Cheats and Utilities

If you're tired of losing your squaddies and your bases to those bug-eyed, slimy-skinned aliens, you can resort to any of the dozens of shareware TFTD utility programs available. Using some of the utilities listed below, you can make your soldiers into unbeatable supermen, edit the equipment at your bases, adjust the difficulty of game play and perform dozens of other game-related functions. For each of the utilities listed below, I've tried to provide information on the latest version number and the author(s) of the utility. A short, one paragraph description explains what the utility does and how it is used.

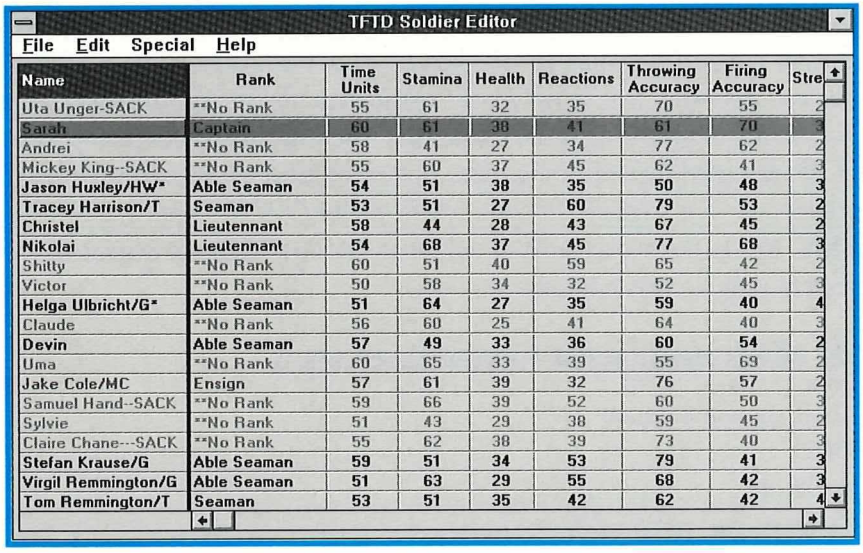
Although the programmers of the utilities listed here have made every attempt to make their utilities as robust and bug-free as possible, use of these utilities carries with it the risk of corrupt saved games, damaged game files and—worst of all—serious damage to other files on your hard disk. That said, it's always a good idea to *make a back-up copy* of your saved game files and to use these utilities sparingly.

Aquanaut Editors

TFTDEDIT v1.0

Type: TFTD aquanaut/money editor
Format: Windows
Author: Joel Jameson
CompuServe: 74001,2453
Internet: 74001.2453@compuserve.com

Easily the most elegant of all the aquanaut editors currently available, Joel Jameson's TFTDEDIT vo.7 runs under the Microsoft Windows environment. Using this utility, you can modify all the numerical attributes of all your soldiers, ranging from rank to M.C. strength. If you're a computing novice and want to take the easiest path to editing your TFTD troopers, this is the utility to get.



Name	Rank	Time Units	Stamina	Health	Reactions	Throwing Accuracy	Firing Accuracy	Stre
Uta Unger-SACK	**No Rank	55	61	32	35	70	55	2
Sarah	Captain	60	61	38	41	61	70	3
Andrei	**No Rank	58	41	27	34	77	62	2
Mickey King--SACK	**No Rank	55	60	37	45	62	41	3
Jason Huxley/HW*	Able Seaman	54	51	38	35	50	48	3
Tracey Harrison/T	Seaman	53	51	27	60	79	53	2
Christel	Lieutennant	58	44	28	43	67	45	2
Nikolai	Lieutennant	54	68	37	45	77	68	3
Shitty	**No Rank	60	51	40	59	65	42	2
Victor	**No Rank	50	58	34	32	52	45	3
Helga Ulbricht/G*	Able Seaman	51	64	27	35	59	40	4
Claude	**No Rank	56	60	25	41	64	40	3
Devin	Able Seaman	57	49	33	36	60	54	2
Uma	**No Rank	60	65	33	39	55	69	2
Jake Cole/MC	Ensign	57	61	39	32	76	57	2
Samuel Hand--SACK	**No Rank	59	66	39	52	60	50	3
Sylvie	**No Rank	51	43	29	38	59	45	2
Claire Chane---SACK	**No Rank	55	62	38	39	73	40	3
Stefan Krause/G	Able Seaman	59	51	34	53	79	41	3
Virgil Remmington/G	Able Seaman	51	63	29	55	68	42	3
Tom Remmington/T	Seaman	53	51	35	42	62	42	4

Figure 11.1. Joel Jameson's Aquanaut editing utility.

XCOM2 Aquanaut Editor v2.0

Type: TFTD aquanaut editor
Format: Windows
Author: Joshua Malik
America Online: Xcbxcbx
Internet: xcbxcbx@aol.com

Although not quite as flashy as Joel Jameson's TFTD soldier editor, Joshua Malik's XCOM2 Aquanaut Editor v2.0 gets the job done. It too runs under Windows, making it extremely easy to install and use. Instead of presenting the soldier data all on one screen (like Joel Jameson's utility), this program makes you page through data one soldier at a time. Aside from that minor gripe, this is one of the easiest to use soldier editors available.

Soldier.exe

Type: TFTD aquanaut editor
Format: DOS
Author: Drew Ruland
CompuServe: 76460,170
Internet: 76460.170@compuserve.com

A DOS-based aquanaut editor, Drew Ruland's TFTD soldier editor raises the ability scores of all your soldiers to near maximum levels. To use it, simply copy the utility to your TFTD directory and run it from the DOS prompt. After the program has prompted you for the saved games you wish to edit, it will increase all of the soldier abilities (including M.C. scores and armor) in that saved game to maximum levels. Unfortunately, editing a file that was saved on the battlescape screen will result in soldiers not being affected by their new abilities until they return to base. One nice feature of this utility is that it automatically backs up your soldier data files, saving the original contents in a file called SOLDIER.BAK. Not as flexible as most of the other shareware editors available, this utility is nevertheless easy to install and use.

xALTER: TFTD Aquanaut Customizer v2.1

Type: TFTD aquanaut editor
Format: DOS
Author: Rod Hillis
CompuServe: 73500,2230
Internet: 73500.2230@compuserve.com

xALTER v2.1 is a TFTD aquanaut customizer that will globally adjust aquanauts after the user sets a variety of attribute parameters. A tag is then added to the name of each aquanaut to indicate if an attribute value meets a set of user-defined criteria. For example, this utility will add the suffix -"rF" to the name of a soldier if that soldier has an average reaction score but an exceptional firing accuracy. This utility is perfect for screening large amounts of soldiers and applying a descriptive moniker to each. (See Chapter 5, "Aquanauts," for more information on soldier specialization.) Other options include the ability to import, export, clone, and sack individual aquanauts. You can also track a variety of aquanaut-related statistics, such as mission kills (with a top 10 kill list),

squad kill averages, and the number of kills per mission. You can also edit the name, rank, armor, gender, and any attribute value (including M.C. strength/skill) of any aquanaut. xAlter also includes a base money editor which you can use to solve your financial problems.

X-COM/UFO to TFTD Cryogenic Utility v.90

Type: X-COM to TFTD soldier transfer utility
Format: DOS
Author: Jeremy Reaban
America Online: TheDeadman
GEnie: J.Reabani
Internet: TheDeadman@aol.com

One of the most unique TFTD utilities available, Jeremy Reaban's X-COM/UFO to TFTD Cryogenic Utility v.90 allows you to transfer your soldiers from the original X-COM to TFTD. It works well; I was able to use the utility to transfer my battle-hardened squad of X-COM grunts to TFTD without much trouble. The utility carries over just about every aspect of your troopers, including ability scores, mission statistics, soldier gender, and the physical appearance of the trooper in question.

Money Editors

Money.exe

Type: Money editor
Format: DOS
Author: Weslee Bilodeau
CompuServe: 75552,1575
Internet: Shano@gcomm.com

A simple money editor, this tiny program will add vast amounts of cash to the X-COM treasury, making your financial woes a thing of the past. Unfortunately, this utility affects ALL your saved games and only adds a fixed amount ($2,000,000,000) of money to your treasury.

XCOMoney.exe

Type: Money Editor
Format: DOS
Author: Unknown

Another money editor, this utility allows you to adjust the amount of money available to you in TFTD. To use, simply copy the XCOMONEY.EXE into a TFTD saved game directory, and then run XCOMONEY. It will ask you if you want to increase the amount of money in the saved game. Type "Y" to make the cheat work its monetary magic.

Research and Manufacturing Editors

Research.exe

Type: Research editor
Format: DOS
Author: Weslee Bilodeau
CompuServe: 75552,1575
Internet: Shano@gcomm.com

This little utility edits the UFOpedia section of all your saved games. After running this utility, you'll be allowed to create any base facility or manufacture any product. It will also remove all the items from your research menu, allowing you to dismantle your laboratories and sack all of your money-grubbing scientists.

Produce.exe

Type: Production editor
Format: DOS
Author: Weslee Bilodeau
CompuServe: 75552,1575
Internet: Shano@gcomm.com

Once executed, this TFTD saved game utility will edit your game files to allow you to produce anything that your manufacturing section can produce. This utility will not alter data contained in the UFOpedia, nor will it edit your base facilities.

XCOM2UFP—Full UFOpedia for XCOM 2

Type: UFOpedia replacement
Format: DOS
Author: Khor Chin Heong
Internet: khor@kch.pl.my

If you've had trouble researching all the items in TFTD, this batch of files may be the answer. Simply copy the files included in the XCOM2UFP.ZIP archive to a savegame directory. The next time you load that saved game, your UFOpedia will be complete and you'll be able to manufacture all the items available.

Base Editors

XCOM2 Base Editor v1.0 (TFTDBEDT.EXE)

Type: TFTD Base editor
Format: Windows
Author: Joshua Malik
America Online: Xcbxcbx
Internet: xcbxcbx@aol.com

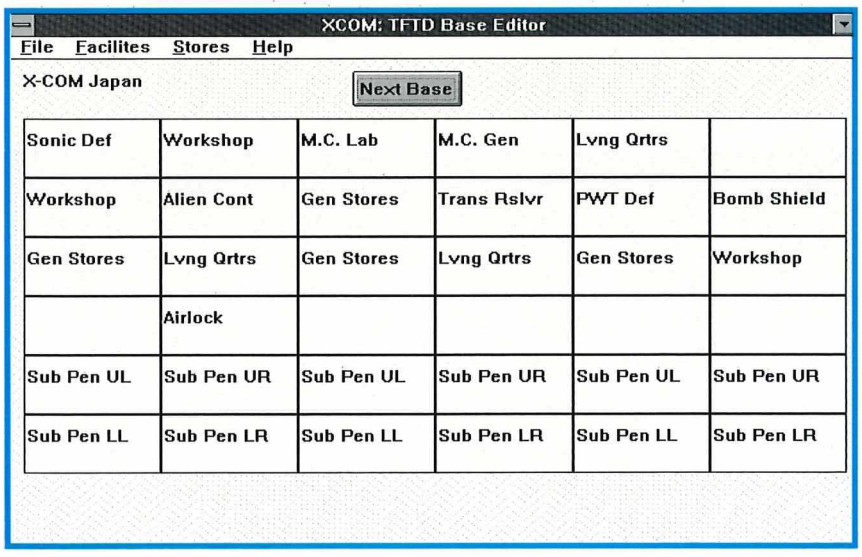


Figure 11.2. Joshua Malik's XCOM 2 Base Editor v1.0.

A Windows-based base editor, Joshua Malik's XCOM2 Base Editor v1.0 is an exercise in point and click simplicity. Although it can't match the level of functionality displayed in some of the other base editors mentioned here, it is by far the easiest to install and use.

XCOM2 Base Editor v1.01 (TFTDBASE.EXE)

Type: TFTD base inventory editor
Format: DOS
Author: Thomas Mellen
Internet: TMellen@IBM.net

This little marvel allows you to modify all the equipment stored at each base in any saved game. Using this utility you can adjust and modify the amount of weapons, ammo, and equipment at the base, facilitated by a slick menu-based interface.

Multi-Function Editors

XCOM 2: TFTD Cheat Utility v1.04

Type: Multi-function editor
Format: DOS
Author: Douglas Peterson
CompuServe: 73014,3320
Internet: 73014.3320@compuserve.com

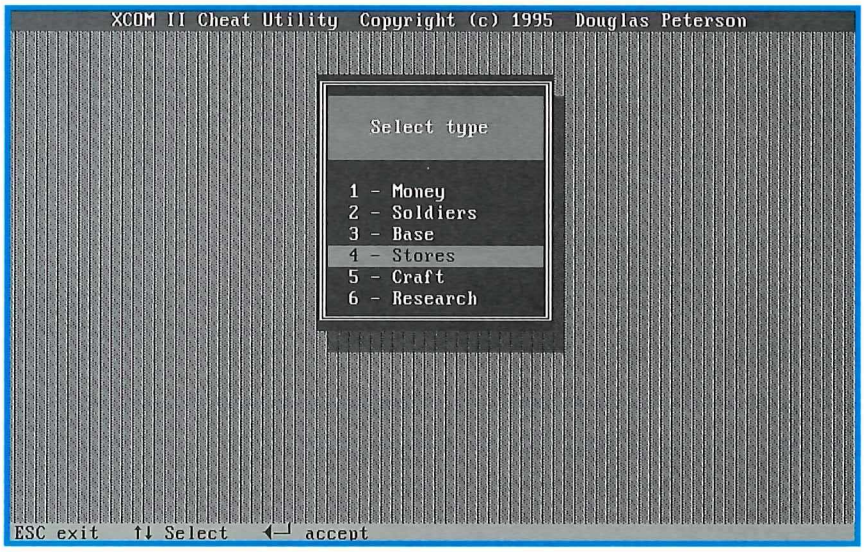


Figure 11.3. Douglas Peterson's X-COM: TFTD cheat utility.

One of the best TFTD utilities, this program takes the Swiss army knife approach to game enhancement. Using this utility you can edit soldier stats, add money to your coffers, alter the layout of your bases, edit base stores, and modify and adjust craft types and craft weapon settings. It even allows you to edit the research aspects of TFTD, allowing you to build and manufacture goods without acquiring the aliens and special materials first.

XCOM2: TFTD Editor

Type: Multi-function TFTD editor
Format: DOS
Author: Robert Bridenbecker
Internet: Mefisto@ix.netcom.com

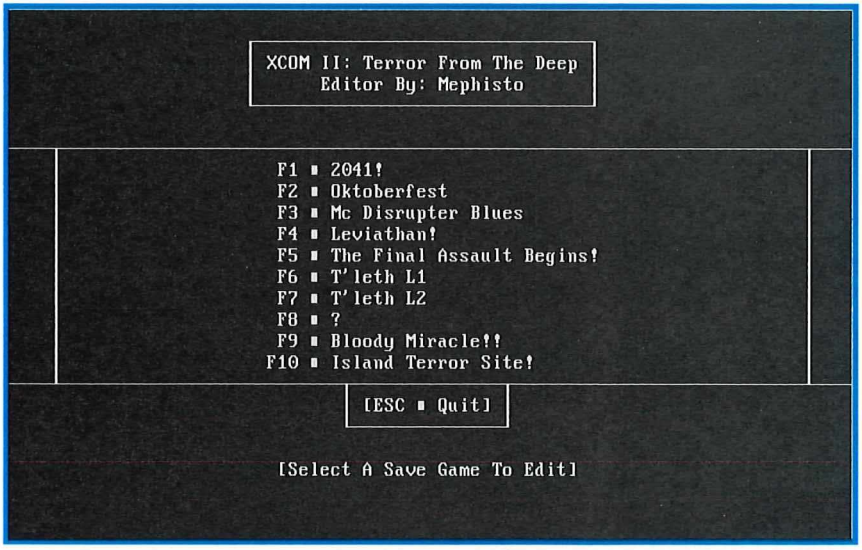


Figure 11.4. Robert Bridenbecker's X-COM2: TFTD editor.

Although not as fully featured as a few of the other multi-function utilities listed here, Robert Bridenbecker's XCOM2: TFTD editor was quite possibly the first TFTD utility to hit the market. Using this editor you can adjust three primary aspects of TFTD: money, aquanaut abilities, and base inventory. Using the aquanaut portion of the editor, you can adjust such abilities as reactions, strength, and firing accuracy. For bases, you have the option of receiving ANY item available that can physically be held in your base stores.

XC2ME2.ZIP—XCOM 2 Multi-Editor v0.2

Type: Multi-function TFTD editor
Format: DOS
Author: Khor Chin Heong
Internet: khor@kch.pl.my

Yet another utility by the productive Mr. Heong, this utility allows you to edit all sorts of saved game data, including weapons, ammo, armor, the contents of your alien containment facilities, and the layout of your base facilities.

Dave Durbin's TFTD utility

Type: Multi-function TFTD game editor
Format: DOS
Author: Dave Durbin
CompuServe: 100102,2062
Internet: ddurbin@cix.compulink.co.uk

Quite possibly the most fully featured of all TFTD utilities, Dave Durbin's TFTD game editor boasts an incredible list of game editing features. In addition to the usual abilities of editing soldiers, base layouts, base equipment, and ship loadouts, a few novel features make this utility truly stand out. Using a slick point-and-click DOS-based interface, you can locate alien bases; display the number, location, loadouts, and ability scores of all aliens in ground assault missions; convince countries which have sided with the aliens to return to your camp; re-load soldier weapons during combat, and even teleport objects and troops across the battlefield!

XCOM2 Game Editor v1.1

Type: Multi-function TFTD game editor
Format: DOS
Author: Arrow Computer Services
Internet: acs@teleport.com

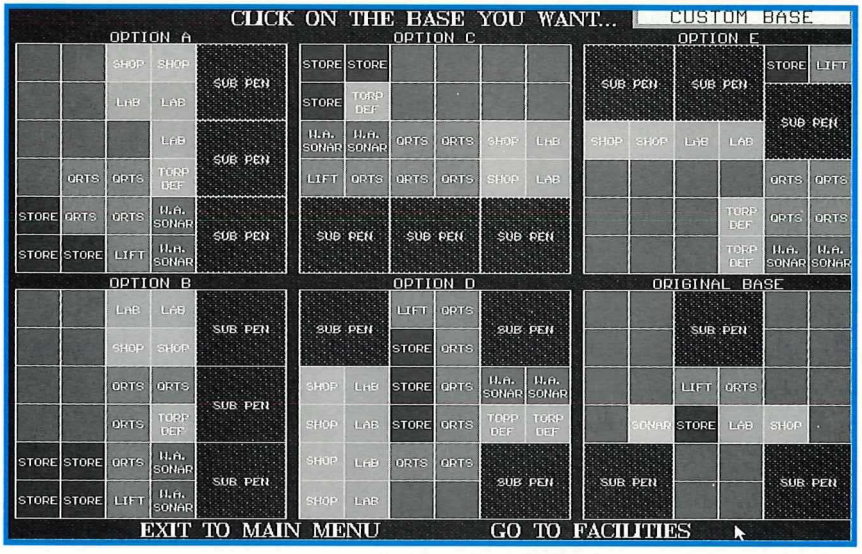


Figure 11.5. Arrow Computer Service's X-COM2 game editor.

The first thing you'll notice about Arrow Computer Service's XCOM2 game editor is the polished DOS-based interface. Even though it runs under DOS, it sports a polished mouse-driven, point-and-click interface. Unfortunately, it only offers a very limited amount of features in the shareware version, putting it behind most of the other multi-editors listed here.

Miscellaneous Editors

XC2WEAP.ZIP—XCOM 2 Weapon Editor v0.1

Type: TFTD Weapon editor
Format: DOS
Author: Khor Chin Heong
Internet: khor@kch.pl.my

If you're tired of using the wimpy pop guns you're supplied with at the start of the game (more specifically, the anemic Harpoon and Gauss rifles), you can use Khor Chin Heong's XCOM 2 Weapon editor to create your own super-weapons. Using this utility, you can edit weapons and ammo to your heart's content. Want a sonic cannon that has 100% accuracy, does 200 points of damage, and costs next to nothing to use? This utility has got you covered.

XC2ALIEN.ZIP—XCOM 2 Alien Containment Editor v0.1

Type: TFTD Alien Containment editor
Format: DOS
Author: Khor Chin Heong
Internet: khor@kch.pl.my

One of the most griped about glitches in both the original X-COM and TFTD is the way live aliens are handled by the game once captured. Normally, they're shuffled off to the alien containment facility, never to be seen again. Using Khor Chin Heong's Alien Containment editor, you can add and remove aliens from your containment units, freeing up space, or giving you the high-ranking aliens you need to complete vital game research.

XCOM Utility 1.1

Type: Multi-function X-COM/TFTD game editor
Format: DOS and OS/2
Author: Scott Jones
Internet: stjones@vnet.ibm.com
America Online: stjones

Whereas most of the other utilities discussed here were designed mainly to make the game easier for TFTD newbies, this utility allows you to make the game harder. This utility works both with the original X-COM and TFTD. This utility allows you to modify and tinker with certain parts of the game that other editors don't even touch: you can change the firing accuracy and reaction scores of all aliens to 100, remove their M.C. ability, and change the weapons the aliens carry. You can even add more aliens to the game, and—most interesting of all—you can switch sides, allowing you to control alien units against your own X-COM troopers! Needless to say, this DOS-based, command-line driven utility is not for novices. If you're an X-COM veteran looking for the ultimate challenge, however, this utility has the goods.

FAQs and Text Files

XCOM2: TFTD Unofficial Strategy Guide and FAQ

Type: Frequently Asked Questions (FAQ) file
Filename: XCOM2USG.TXT
Format: DOS ASCII Text file
Author: Kuo-Sheng (Kasey) Chang

Maintained by Kuo-Sheng (Kasey) Chang, this FAQ is an invaluable resource to any TFTD gamer. Kasey has collected tips, tactics, and strategies from a variety of sources and

complied them into this 50-page document. There's some valuable information here, including a pistol vs. rifle analysis and a production item profitability study by Kasey Chang and Jeff Shaffer. This FAQ can be found on most on-line services, or it can be downloaded from Kasey's own World Wide Web (WWW) page at the following address:

http://userwww.sfsu.edu/~kschang

Kasey can also be contacted at either of the following e-mail addresses:

Internet: kschang@sfsu.edu or ksc1@aol.com

America Online: KSC1

On-Line Services

Some of the best sources for hints, tips and strategies on TFTD can be found in the gaming forums of the four largest commercial on-line services: America Online, CompuServe, GEnie, and Prodigy. In the following section we'll take a look at each of these services and what they offer to the TFTD gamer.

America Online

Arguably the easiest commercial on-line service to install and use, America Online features a wide range of gaming forums, files, and other resources. To access America Online's computer gaming forums, use the keywords GAMES FORUM. On the screen that appears, select the **MESSAGE BOARD** button. LIST CATEGORIES, and then select the STRATEGY AND OTHER SIMS folder. Inside this area you'll find a message folder dedicated exclusively to TFTD. In addition, MicroProse also maintains a forum on AOL. To reach that forum, simply use the keyword MICROPROSE. In either location you can trade tips, tricks and tribulations with other TFTD gamers.

For more information about America Online, contact:

America Online
8619 Westwood Center Dr.
Vienna, VA 22182

Telephone: (800) 227-6364
Fax: (703) 883-1509

CompuServe

Like America Online, CompuServe provides a wide array of message forums and file libraries. Unlike America Online, CompuServe's file libraries—especially with regard to

TFTD game utilities—tend to have more depth in terms of the number and variety of files available.

To reach the general computer gaming forum, use the keywords GO GAMERS. This will take you to the Gamer's forum, an on-line forum for computer gamers to discuss popular computer games. Information on TFTD can be found in both the War Games and Strategy message folders. You can reach Microprose's CompuServe forum by using the keywords GO GAMEPUB. From the menu that appears, select GAME PUBLISHERS B FORUM. This will take you to the game publisher's forum which Microprose uses for technical support.

For more information about CompuServe, contact:

CompuServe
P.O. Box 20212
Columbus, OH 43220

Telephone: (800) 848-8199
Fax: (615) 457-0348

GEnie

Compared to all the other major on-line services, GEnie quite possibly boasts the largest concentration of game resources. Central to this position in the on-line gaming community is the Games Roundtable, which is hosted by *Computer Gaming World* columnist Scorpia. To reach this area, use the keyword SCORPIA, or enter the page number M 805. Once inside this area, you'll be able to download demos, read messages from knowledgeable game industry professionals and experienced gamers, and discuss just about anything and everything that has something to do with computer gaming.

For more information about GEnie, contact:

General Electric Information Services (GEnie)
401 North Washington St.
Rockville, MD 20850

Telephone: (301) 340-4000
Fax: (301) 255-6421

Prodigy

Although Prodigy lacks the robust file areas of the other commercial on-line services, its user-friendly interface and point and click simplicity make it perfect for novice users. The largest area for computer game information is the Game Center; to reach this area, use the jump keywords GAME CENTER. Next, select the GAMES BB button to enter the

computer game bulletin board area. Select WAR/STRATEGY GAMES as your topic, then begin reading the available bulletin board messages, using the words X-COM2 or XCOM2 to find messages dealing with TFTD.

For more information about Prodigy, contact:

Prodigy
445 Hamilton Avenue
White Plains, NY 10601

Telephone: (914) 993-8000

Internet Newsgroups and World Wide Web (WWW) Sites

The comp.sys.ibm.pc.games.strategic Internet Newsgroup

If you're familiar with the Internet, there is perhaps no better source of information on X-COM2 than the comp.sys.ibm.pc.games.strategic Internet newsgroup. In this forum, strategy gamers from all over the world congregate to swap tips, tactics, and tales about their favorite strategy games. X-COM and TFTD are always popular topics here, and you're sure to find dozens of messages on everything from program bugs to the latest TFTD game cheating utility. To access this newsgroup, you simply need an Internet-friendly newsgroup browser (such as AIR News). The address of this newsgroup is :

comp.sys.ibm.pc.games.strategic

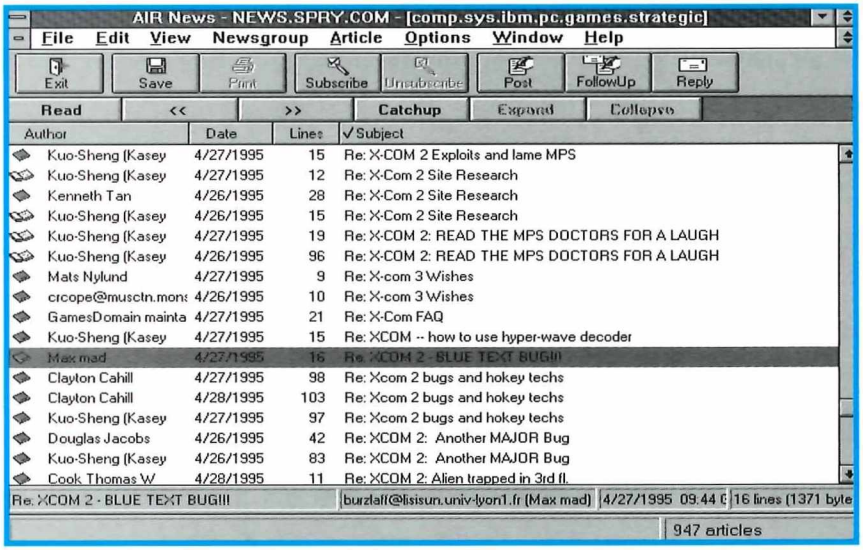


Figure 11.6. The comp.sys.ibm.pc.games.strategic Internet newsgroup.

The Games Domain

Arguably the best game-related web site on the Internet, the Games Domain is a virtual Mecca of game cheats, utilities, FAQs, on-line reviews, and other game-related information. You can download demos for both X-COM and TFTD from this site, as well as a cornucopia of X-COM related files. You can reach the Games Domain at the following address:

http://wcl-rs.bham.ac.uk/GamesDomain

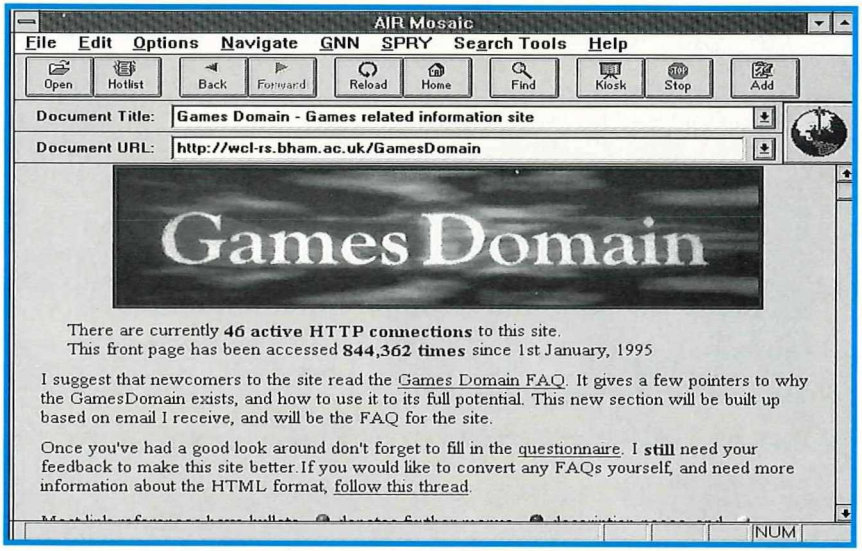


Figure 11.7. The Games Domain.

The Unofficial XCOM/UFO Homepage

Whereas the Games Domain may be the best all around game resource, the Unofficial XCOM/UFO Homepage probably has the most concentrated dose of X-COM/TFTD resources available. In addition to the latest program updates and FAQs, this area offers short stories, mini-reviews, game cheats, and other utilities. This is currently the most comprehensive web site on X-COM and TFTD. This site can be reached at:

http://www-star.st-and.ac.uk/~aa1/XCOM/xcom.html

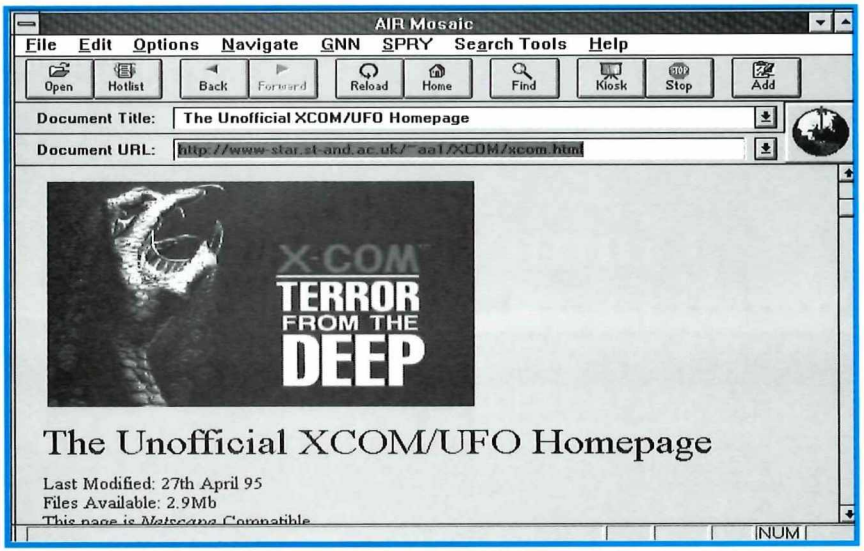


Figure 11.8. The Unofficial XCOM/UFO Homepage.

The Happy Puppy Games Onramp

Another game-related web site, this area is sponsored by Happy Puppy Software, a game development company. Although it can't quite touch the same level of information as the Games Domain (mentioned earlier), it does offer a wide range of game-related files and information. You can reach this web site at the following address:

http://touchstone.power.net/users/HappyPup

Figure 11.9. The Happy Puppy Games Onramp.

X-COM 2 Preview Web Site

This WWW page contains a short slideshow preview of X-COM2. Maintained by Walter Flaschka (aka Regulus), this site displays some screenshots of objects that never made it into the final TFTD game release, such as the shark-man and other game features axed by MicroProse toward the end of the development process. There isn't much else here of interest to TFTD gamers, although Flaschka's Philip K. Dick FAQ will interest even the most jaded science fiction aficionado.

You can reach this web site at the following address:

http://www.interport.net/~regulus

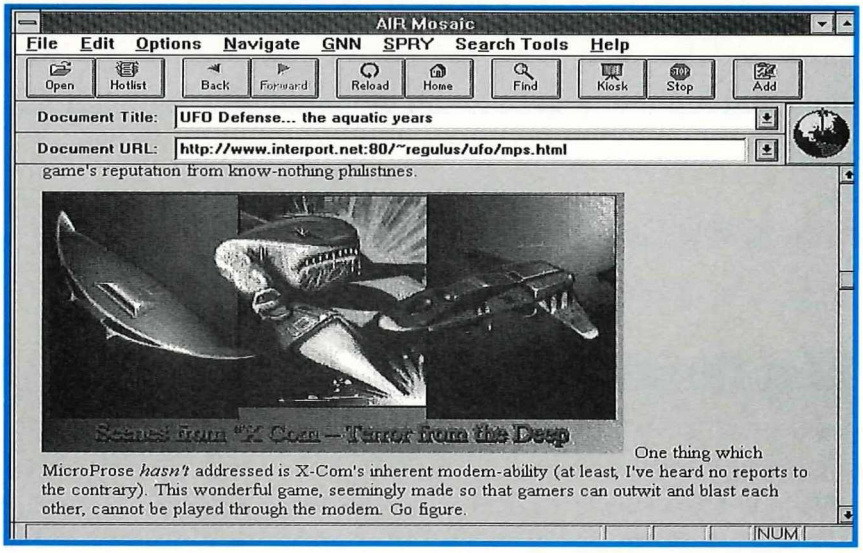


Figure 11.10. X-COM TFTD Preview Web Site.

Computer Gaming World WWW Site

Part of the Ziff-Davis presence on the Internet, *Computer Gaming World*'s WWW site features a wide range of game-related information. Using links to other parts of the Internet, you can use this web page as a launchpad into all sorts of game-related Internet resources.

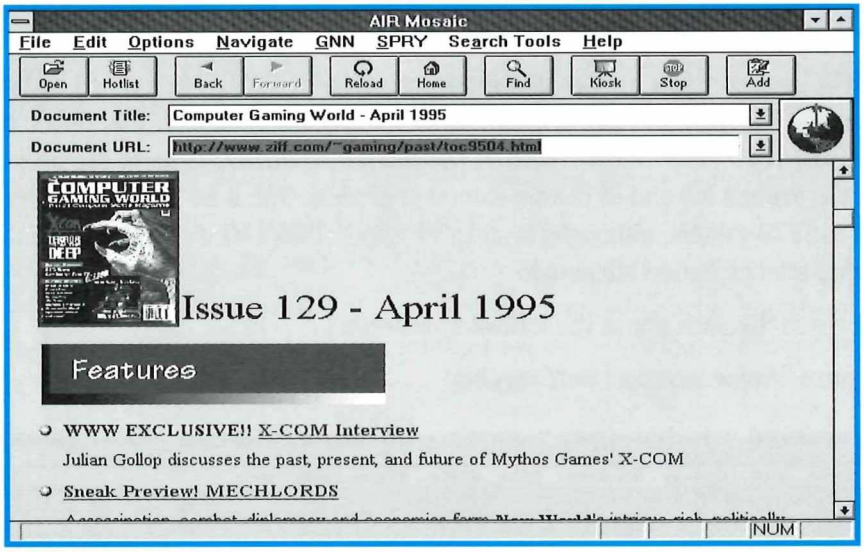


Figure 11.11. Computer Gaming World's WWW page.

You can reach the *Computer Gaming World* WWW site at the following address:

http://www.ziff.com

The MicroProse WWW Site

MicroProse has both a WWW and an FTP site for all their official game demos, slideshows, patches, press releases, and other official MicroProse information. Getting access to the WWW site is easier said than done, because it supports a high volume of traffic. Your best bet is to try this site in the early afternoon or early in the morning to increase your chances of getting access.

Web site	http://www.microprose.com
FTP site	ftp.microprose.com

If you're having trouble accessing the MicroProse FTP site, use the following internet protocol (IP) address: http://199.99.75.2. This address will almost always work, even if the other addresses listed above do not.

Bulletin Board Systems (BBS)

The MicroProse BBS

MicroProse also maintains a technical support BBS. Although not the best source for TFTD game utilities, it is one of the best sites in the country for official MicroProse press releases, product information, and program updates. This 16-line BBS supports modem speeds of up to 28.8 Kbps, and uses the modem settings 8 bits, no parity and 1 stop bit (8N1). The telephone number is:

MicroProse BBS (U.S.) 410-785-1841

Book List

What follows is a small list of books that you may find useful when playing TFTD. These books run the gamut from horror stories by H.P. Lovecraft to modern field manuals of the U.S. Army.

The Infantry Rifle Company, FM 7-10. Department of the U.S. Army.

You can usually find a copy of this official U.S. Army field manual at military surplus stores and other specialized shops. Most of the information isn't much use to a TFTD gamer, although the sections on movement and other aspects of infantry combat are very interesting.

Shaara, Michael. *The Killer Angels.* McKay, New York. 1974.

A book about an elite force of troopers. A good read.

Rommel, Erwin. *Attacks.* Athena Press, Vienna, VA. 1979.

A book on modern combat by one of the most respected generals in all of military history: German General Erwin Rommel, the infamous Desert Fox of World War II.

English, John A. *On Infantry.* Praeger Publishers, New York, 1981.

An exhaustive look at the infantryman and his role in the modern army.

Malone, Dandridge M. *Small Unit Leadership: A Commonsense Approach.* Presidio Press. Novato, CA, 1983.

A bit esoteric for the TFTD gamer, but an interesting resource nonetheless.

Lovecraft, H.P. *The Best of H.P. Lovecraft: Bloodcurdling Tales of Horror and the Macabre.* Ballantine Books, New York. 1982.

This is an excellent compilation of some of H.P. Lovecraft's best work, including *Call of Cthulhu* and *Shadow over Innsmouth*. Some of the aliens and fiction that MicroProse used in TFTD appear to be loosely based upon Lovecraft's work, especially the Deep One Terrorists and the final alien city of T'leth.

Heinlien, Robert. *Starship Troopers*. Ace Books, New York. 1987.

The definitive novel of tactical infantry combat in the far future. Written by one of the greatest authors in the history of science fiction, this is a must read for any tactical infantry combat fan.

Cacutt, Len. *Combat*. Chartwell Books, Inc., New Jersey. 1988.

This coffee table book is loaded with photos, diagrams, and procedures for many types of troop management theory. Despite the broad scope of the book, there is much here to interest the enthusiasts of squad and platoon level studies.

Marine Rifle Company/Platoon, FMFM 6-4. U.S. Marine Corps.

Marine Rifle Squad, FMFM 6-5. U.S. Marine Corps.

These combat training manuals might be difficult to come by, but you may be able to find them in used bookstores or surplus stores. Like the Army manuals listed above, these books share details that may be overqualified for use in TFTD, but still offer an interesting background on real life squad management.

Hopkins, Budd. *Intruders: The Incredible Visitations at Copley Woods*. Ballantine, New York. 1987.

This paperback can probably be found at any retail bookstore. Books about alien abductions and encounters are gaining popularity, though many of these books have been available for years. These books claim to describe the eyewitness accounts of those who have experienced abduction by alien entities. This is background material for the truly committed X-COM player.

Randle, Kevin, and Schmitt, Donald. *UFO Crash at Roswell*. Avon, New York. 1991.

A little closer to the heart of X-COM players, this is the story of a mysterious crash of a UFO and subsequent supposed cover-up by the U.S. Government. The story should inspire ripe thoughts of conspiracy and interest during each X-COM game.

Randles, Jenny. *The UFO Conspiracy*. Barnes and Noble, New York. 1987.

This book is also available in most bookstores and is an attempt to illustrate facts surrounding various UFO sightings and theories.

For Expert Gamers Only

If you've played and beat TFTD on every difficulty level at least twice, you may be ready for an even greater challenge. You can make the game more challenging in a number of ways, but one of the easiest to implement is to impose certain restrictions on the tactics, strategies, and equipment that your soldiers use in combat. With tongue partly planted in cheek, here are a few suggestions.

1. **We take care of our own**

   Some of the most elite infantry units in history have had an extremely strong feeling of esprit d'corps, making the soldiers of the unit look after their comrades. In game terms, this means that your TFTD aquanauts will never leave a fellow soldier—living or dead—in the clutches of the aliens. Soldiers who are stunned, unconscious, or controlled by the aliens must be recovered at all costs. This moral code extends to the dead as well: any aquanauts killed in combat must be found and their corpses must be physically carried out of combat area, along with all of their equipment. If the corpse has been destroyed, any equipment that the soldier carried that still remains must be retrieved.

2. **Extermination!**

   Imagine your squad as a merciless bunch of war dogs that have lost every friend, family member, and acquaintance—even their pets—to those water-sucking aliens. Understandably, your aquanauts are VERY angry. They'll take out their anger in the most direct, aggressive methods possible. In game terms, this translates into every combat mission turning into an all-out bug hunt—all missions must end with no less than 100% of all aliens captured, incapacitated, or killed. Killing aliens with destructive devices such as grenades, sonic pulsers, and disrupter pulse launchers is preferable to any other method.

3. **Good Joes**

   Unlike the amoralistic bunch of war dogs profiled above, these aquanauts are intensely concerned with the impact of the war with the aliens on the civilian population of the Earth. Because of that, saving civilians in terror site missions is a TOP priority. When investigating terror sites, these troopers will only take precise weaponry like Sonic Cannons, Sonic-Blasta Rifles, and others. Area effect weapons—such as Magna-Blast Grenades, Particle Disturbance Grenades, and Sonic Pulsers—are strictly forbidden, as their use may harm civilians in the area. This squad tends to carry LOTS of Thermal Shok Bombs and Thermal Tazers to safely incapacitate aliens and civilians. Every soldier in this squad is ready and willing to give up his life to save a civilian, even if it means walking into an exploding grenade or taking a bullet for them.

4. **Tough Guys**

   These guys are so tough that the thought of using admittedly powerful weapons such as M.C. Disrupters and Disrupter Pulse Launchers makes them cringe visibly. So, these guys are prohibited from using any M.C. devices or the Disrupter Pulse Launcher in combat ... no excuses! Anything else is fair game.

5. **Berserkers**

   This is probably the most difficult "expert gamer" suggestion of all. Envision your soldiers as the meanest, baddest, orneriest bunch of stone-fisted grunts to ever hit the combat zone. These troopers view every missile weapon—from dart guns to pulse launchers to grenades—as weapons fit only for "lily-livered sissies and cowards." In fact, even armor is despised by these heavy-metal masochists. The only way these troopers ever fight is up close and personal, going toe-to-toe with the alien invaders using no armor or ranged weapons. Hand-to-hand weapons are the only arms these troopers will ever consider using. In game terms, this translates into your troopers only using Thermal Tazers, Vibro Blades, Thermic Lances, or Heavy Thermic Lances. As can be expected, extremely high ability scores in strength, health, and stamina would be vital for these soldiers.

6. **Utilities**

   If you've beat the game repeatedly at the highest difficulty level, trounced the enemy on every battlefield using the suggestions outlined above, and you're still itching for more action, your ultimate satisfaction may lie in the use of Scott Jones' X-COM utility (listed earlier). Using this utility you can tinker with the ability scores and statistics of all the aliens you face, making them super-charged human hunters. You can even use the utility to add additional aliens to combat missions, giving your soldiers more aliens to deal with.

12

Troubleshooting

For some TFTD gamers, the biggest challenge won't occur in the form of tenacious Lobster Men, conniving Gill Men, or ravenous Triscene terrorists. Instead, it will be facing off against such equally intractable foes as CONFIG.SYS, AUTOEXEC.BAT, and DOS4GW. Even the Great Alien himself amounts to a hill of beans if you can't get TFTD to run properly on your system.

In this chapter, you'll take a close look at installing, configuring, and troubleshooting TFTD. In addition, you'll discuss getting TFTD to work with OS/2 Warp, and Windows 95, plus you'll take a look at the bugs present in the current release of TFTD.

TFTD System Requirements

Before you even begin the installation process for TFTD, you should make sure that your computer meets the following program requirements.

Terror From The Deep requires the following:

- IBM or compatible PC with a 386, 486, or Pentium processor
- MS-DOS 5.0 or higher
- 4 MB RAM
- VGA graphics
- Mouse
- 15 MB hard disk space (Floppy version)
- 4 MB hard disk space (CD-ROM version)

Installing the CD-ROM Version of TFTD to Your Hard Disk

If you have the CD version of TFTD, you may have noticed that the game pauses periodically to read information off of the CD-ROM. Although this delay takes only a few seconds, you can avoid the delay problems entirely by installing all of the files on the TFTD CD-ROM directly onto your hard disk. If you want to install all of the game files from the CD-ROM version of TFTD onto your hard drive, you can do so, but not by using the normal program installation. To install all of the files from the CD version to your hard drive, follow these steps:

1. Insert the TFTD disk in your CD-ROM drive.
2. Change to your CD-ROM directory (usually D:) and look for a directory called HARDDISK.
3. Change to this new directory, and then type INSTALL.
4. Follow the instructions in the set-up program to install TFTD onto your hard disk.

Installing all the files from the CD-ROM onto your hard disk takes up about 15 MB of hard drive space.

Running Under Non-DOS Operating Systems

MicroProse recommends operating TFTD only on IBM compatible computer systems running OS/2 Warp or Windows 95. You may have to make some minor modifications to your system files to get TFTD to work properly under these operating environments, and the game may not always function perfectly. To properly configure TFTD under these operating systems, read the following advice and suggestions.

OS/2 Warp

When running TFTD under OS/2 Warp, you get music, FX, smooth action, and little noticeable slowdown from DOS. Unfortunately, there is one little glitch that hinders gameplay. The problem is that keyboard input causes the game to crash. You can tweak all the DOS settings Warp has, but nothing solves the problem completely. Most just minimize the danger of a system crash. With the following settings, a crash occurs once every fifteen to twenty keystrokes, which is barely enough to name a base and save the game under a one-character moniker. Please note that mileage may vary, and there are times when TFTD crashes under Warp on a single keystroke. Incidentally, a "crash" refers to OS/2 Warp shutting down the game because of a system error. In these cases, Warp itself stays intact and is usually able to restart the game without a need to reboot. Here are some useful keyboard settings for OS/2 Warp users (courtesy James Joule):

- KBD_ALTHOME_BYPASS ON
- KBD_BUFFER_EXTEND ON
- KBD_CTRL_BYPASS NONE
- KBD_RATE_LOCK ON

Note that in BIOS, it helps to have the Typematic Rate Programming DISABLED.

Other settings that help are:

- AUDIO_ADAPTER_SHARING Required
- DPMI_DOS_API Enabled
- DPMI_MEMORY_LIMIT 128
- DOS_UMB ON
- DOS_HIGH ON
- HW_TIMER ON

INT_DURING_IO	ON
VIDEO_8514A_XGA_IOTRAP	OFF
VIDEO_ONDEMAND_MEMORY	ON
VIDEO_RETRACE_EMULATION	OFF
EMS_MEMORY_LIMIT	0
XMS_MEMORY_LIMIT	8200

Installing the proper keyboard handler using the DOS_DEVICE setting might fix the keyboard lock-up problems, but finding a good keyboard handler may be difficult.

Each OS/2 Warp system may need some individual tweaking of system parameters for optimum performance, but the aforementioned settings should get you started playing TFTD under OS/2 Warp.

A note on OS/2 Errata: To get to the settings for a program, click the program icon, click the Settings in the pop-up window, and then choose the Session folder from the Settings window. Click the DOS Settings button, and it prompts you for changes.

Windows 95

Windows 95 information courtesy James Moore, Paul Mitchell, and Andrew Morrissey.

To run TFTD using Windows 95, perform the following:

1. Run Windows Explorer from the Start Menu.
2. Right-click and drag the terror.bat icon from Explorer to your desktop and select **CREATE SHORTCUT** here.
3. Right-click on the new icon and click on the properties option from the menu.
4. Select the **PROGRAM** tab.
5. Click the **ADVANCED** button.
6. Check the **MS_DOS MODE** check box.
7. Click **OK** and these settings will be saved.

You should now be able to run TFTD from the desktop icon.

It seems that some Windows 95 users have experienced problems running MicroProse games with some sound cards. The most common solution to this problem seems to be to select the standard SoundBlaster settings or to re-install the sound card drivers.

Windows 95 seems to be completely compatible with X-COM: Terror From The Deep. To install TFTD, run the install program from either the floppy or CD using Windows 95. This process installs the necessary game files to your hard drive. The only currently known problem of running TFTD under Windows 95 concerns the SoundBlaster 16 and SoundBlaster wavetable daughtercards. Selecting the SoundBlaster 16 option for sound effects combined with the General MIDI option for music usually causes the game to lock up. This is a problem with TFTD itself, and is not specific to Windows 95. MicroProse is aware of the soundcard problems and is addressing it. In the meantime, select the regular 8-bit SoundBlaster option for sound effects and use General MIDI for music.

After TFTD is installed, it can be run by editing the terror.bat batch file and by adjusting a few properties in Windows 95 itself. Under the MISC menu turn off the screen saver and always suspend under Background, and then set idle sensitivity to high. Under the SCREEN menu, set usage to full-screen. MEMORY settings should all be set to auto with "Uses HMA" checked under XMS.

If you are having memory problems while running TFTD under Windows 95, consider erasing your autoexec.bat and config.sys files. These files are not needed for Windows 95, and they only eat up valuable memory. If you have a program that will only run under MS-DOS, simply give it its own autoexec.bat and config.sys files.

1. Install TFTD as normal.

   Place the first disk in the disk drive. From the 'My Computer' icon, double-click on the floppy drive icon that holds the install disk. Double-click on the install icon, and the game should install. It then prompts you for the installation directory and for your sound card settings.

2. Modify program settings.

   Right-click on the TFTD icon, and then click **PROPERTIES**. Examine the information displayed here to make sure that the directories listed are correct. Click the **PROGRAM** button to bring up a list of program settings. Set the RUN option to NORMAL WINDOW. Enable the CLOSE ON EXIT setting as well. Next, go to the MEMORY settings. Set the conventional memory settings to 600K, but leave the other settings on AUTO. You may also enable protected mode memory if you wish, although you may not see any effective difference. Under SCREEN options, select **FULL SCREEN** mode. Turn off the option for the screen saver.

   Enable the mouse for EXCLUSIVE MODE, and then set the termination option to WARN IF STILL ACTIVE. You can even change the icon to something else if you want. Finally, click **OK**.

3. Run TFTD.

   Double-click on the TFTD icon and the game should load and run.

4. Shortcuts

   So you don't have to go through the subdirectories to find the game, you could make a shortcut for it on your desktop. Hold down the right mouse button on the TFTD icon, and then drag it to your desktop.

   Click the **CREATE SHORT-CUT HERE** option, and you will have a new icon on your desktop (with a little arrow in the corner of the icon indicating that it is a shortcut).

5. Miscellaneous

   You may have Windows playing audio CD music while playing the game. Hitting the ALT-TAB key combination lets you alternate between Window 95 and the game. However, any music played by the game during the switch hangs until you re-activate the game. To re-activate the game, click the TFTD section on your status bar.

Known and Suspected Bugs

During a game of TFTD, you may run across one (or several) of the following program bugs. At press time, MicroProse has mentioned that a patch is in development which will fix some of these problems. Overall, however, TFTD has proven itself to be a much more stable and solid product than even the original X-COM.

Many "bugs" and "crashes" can be attributed to the use of shareware game utilities to alter the TFTD save game files, such as the utilities described in Chapter 11, "Game Resources." The most common problems resulting from the excessive use of these utilities is what is commonly referred to as the "blue text bug." In these cases, your TFTD screen vanishes and is replaced by several pages of blue text. Because using game cheats and utilities can increase the likelihood of program crashes, glitches and lock-ups, you should *always* make a back-up copy of your saved game files before using any game utilities.

Blue Text Bug

As mentioned previously, this bug usually results from the excessive use of saved game editing utilities. However, this bug has appeared on certain computers with non-standard memory configurations. Some occurrences can be directly related to problems with the DOS4GW 32-bit DOS extender by Rational Systems. If you experience this bug and have not been using cheat utilities, booting with a clean boot disk will most likely solve your problems.

Problems with SoundBlaster 16 and Daughtercard

Some users have reported difficulty when using the SoundBlaster 16 and the Waveblaster daughtercard. Selecting General MIDI as the sound option in the game's setup program seems to be the source of the problem. So until MicroProse releases a patch, select 8-bit SoundBlaster for sound effects and General MIDI for music. This should allow the game to function properly.

Research Tree Problems

As explained in Chapter 3, "Money, Manufacturing, and Research," the current implementation of the research tree has two "holes." To obtain Ion Armor and the M.C. Reader and Disrupter, some research topics must be completed in an exact order with certain items present in base stores. For Ion Armor, the following items must be researched in this exact order:

> Deep One Corpse — Aqua Plastics — Aqua Plastic Armor — Zrbite — Ion beam accelerators — Live Deep One Terrorist.

If this order is not followed, Ion armor can *never* be obtained. In the case of the M.C. Reader and the M.C. Disrupter, you must have an M.C. Reader present at your base stores before research on the M.C. Lab is completed. If research on the M.C. Lab is completed without an M.C. Reader present in your base stores, you'll never get the opportunity to start research on the M.C. Reader or M.C. Disrupter.

Underwater Weapons Firing in Opportunity Fire Phase

Although the Hydro-Jet Cannon and the Torpedo Launcher are supposedly only capable of firing underwater, for some reason they can fire above ground during the alien movement phase. This seems to occur only when a soldier carrying either of these weapons spots an alien during the alien movement phase. If his reactions score is high enough to fire on the alien, he'll fire the weapon just as if he was underwater!

Proximity Grenades Lose Primed Status

Although discussed as a unique trick in Chapter 6, "Tactical Combat," this is actually a bug. In this case, any primed grenades lose their primed status if the game is saved and then re-loaded.

Soldier Deployed Outside of the Transport on Combat Missions

This bug occurs when you are using the Leviathan transport to carry large numbers of soldiers. When you arrive at a combat site, you may find one or more of your aguanauts already deployed outside of the transport.

Problems with CD Introduction

The CD-ROM version of TFTD features an animated introduction which helps set the stage for the game. On some computers the CD version plays a slide show of static images instead of the full, animated introduction. Some users have reported that this bug also can occur if the entire CD-ROM version of the game is installed on the hard drive.

HE Weapon During Base Defense

This bug usually occurs during a base defense action. During the alien movement phase, one of your soldiers sees an alien and gets the chance to use opportunity fire. Instead of firing his normal weapon, the normal damage of the weapon is replaced with an explosive projectile, much like an HE round fired from a Gas Cannon.

Molecular Controlled Aliens

After you're successfully controlled a Triscene, Hallucinoid, or Xarquid, a target identifier may appear. If you click on the identifier, it will center the screen on the alien. Although the alien is under your control, a programming glitch in the game causes the alien to view parts of itself as the enemy. To see the alien commit suicide, target the portion of the alien that the computer sees as the enemy.

Game Updates and Patches

Just before press time, MicroProse released a patch for TFTD that fixed many of the aforementioned bugs and gameplay problems. If you run across any of these bugs, chances are you're using the old version of TFTD. The filename for the latest patch is TFTDV2.ZIP, and it can be found on most online services. For the latest program updates, refer to any of the official MicroProse online resources provided in the following sections

Obtaining Technical Support

Technical support for X-COM: Terror From The Deep can be obtained from a variety of sources, including MicroProse's own technical support line.

MicroProse

MicroProse has technical support personnel in a wide variety of countries, including the U.S. If you have any questions or problems, call MicroProse's Customer Service at any of the following addresses.

United States

MicroProse
180 Lakefront Drive
Hunt Valley, MD 21030

Tel: (410) 771-1151 (9am to 5pm, Monday through Friday EST)
Fax: (410) 771-1174 (9am to 5pm, Monday through Friday EST)

- MicroProse BBS: (410) 785-1841
  24 Hour access, supports modem speeds up to 28,800 baud.
- Spectrum Holobyte BBS: (510) 522-8909
  24 hour access, supports modem speeds up to 14,400 baud.

United Kingdom

Tel: +44 (0)1454 329510 (1000-1230 and 1330-1600 GMT)
Fax: +44 (0)1454 326499 (0900-1730 GMT)

MicroProse-Europe
The Ridge
Chipping Sodbury
Bristol
England, UK, EU
BS17 6AY

MicroProse-UK BBS #1: +44 (0)1454 327083 (14,400 baud)
BBS #2: +44 (0)1454 327084 (14,400 baud)

Both have 24 hour access and support modem speeds up to 14,400 baud.

Germany

MicroProse-Spectrum Holobyte GmbH
Bartholomausweg 31
33334 Gutersloh
Germany, EU

Tel: +49 (0)5241 946480 (1500-1800 CET) Tuesdays only

- MicroProse Germany BBS: +49 (0)5241 946484

24 Hour access, supports modem speeds up to 28,800 baud.

CompuServe

E-mail addresses:

- MicroProse (USA): 76004,2223
- Spectrum Holobyte (USA): 76004,2144
- MicroProse (Europe): 71333,314

Game Publisher's Forum "B"

As mentioned in Chapter 11, "Game Resources," MicroProse and Spectrum Holobyte have public forums and file libraries on CompuServe for on-line discussion, bug-reporting, patches, and other information. MicroProse can be found in Game Publishers Forum "B" (GO GAMEPUB).

GEnie

Scorpia's Roundtable:
Keyword: Scorpia

E-mail addresses:

- MicroProse USA: MICROPROSE
- MicroProse Europe: MPS.UK

Prodigy

MicroProse does not have a formal conference on Prodigy, but the company does have an e-mail address.

E-mail address: XHFKI5D

Delphi-Internet

Forums:

- MicroProse-USA forum: US-DELPHI, GAMESIG
- MicroProse-Europe forum: UK-DELPHI, FEATURED FORUMS, MICROPROSE

Mailboxes:

- MicroProse-USA mailbox: MICROPROSE3
- MicroProse-Europe mailbox: MPS_EUROPE

Fidonet

- MicroProse Conference: Node 1:2617/107

Internet

MicroProse also has a presence on the Interent for technical support, as well as fully-featured FTP (File Transfer Protocol) and a World-Wide Web (WWW) homepage.

E-mail addresses:

- MicroProse USA: 76004.2223@compuserve.com
- Spectrum Holobyte: 76004.2144@compuserve.com
- MicroProse Europe: 71333.314@compuserve.com

FTP Site

MicroProse recently opened an FTP site which allows users to access a fully featured on-line library of game demos, patches, press releases, and other MicroProse-oriented information.

- FTP Site address: ftp.microprose.com
- World-Wide-Web (WWW)

If you're having trouble accessing the MicroProse FTP site, use the following Internet Protocol address:

http://199.99.75.2.

MicroProse also has a homepage on the World-Wide Web (WWW). Using compatible Web Browser software (such as AIR Mosaic), you can reach the MicroProse WWW site by using the following address:

- http:/www.microprose.com.

Inside
X-COM

Interview with Julian Gollop of Mythos Games

Published by MicroProse, the original X-COM was developed primarily by Nick and Julian Gollop of Mythos Games, a game software development firm based in the United Kingdom. In addition to being two of the nicest guys in computer gaming, Nick and Julian combine to form one of the most well respected computer game development teams in the industry. I recently had the opportunity to ask Julian Gollop a few questions about X-COM, Terror From The Deep and the forthcoming X-COM 3.

Portions of this interview courtesy Ziff-Davis Publishing and Computer Gaming World. This interview first appeared in the April 1995 Internet edition of Computer Gaming World, located at the Internet address http://www.ziff.com.

The original X-COM literally caught the computer game industry by surprise, becoming the "sleeper" hit of 1994. During development did you have any idea that X-COM would become so popular?

No, not at all. When we went to work at MicroProse in-house for a couple of months to finish the game they were pretty enthusiastic about it, but we later learned that the project was nearly dropped on two separate occasions (once early on when MicroProse had some financial difficulties and also following Spectrum Holobyte's takeover). The game was not particularly playable until close to publication and we had to work pretty hard to meet the planned release date. Neither of us had actually played the game very much—we relied on feedback from MicroProse's QA department while we concentrated on finishing the programming and debugging. The tactical system was based on some of my earlier games and I knew it was a popular concept, but the strategic element was very much untried and we were concerned about how the whole game would fit together.

Did you both have much input on X-COM: Terror From The Deep?

MicroProse developed X-COM 2 in-house using our game engine. The game scenario was designed by Steve Goss at MicroProse with myself and Nick acting as consultants.

There has been some talk about X-COM 3, which will reportedly feature a totally revised interface with swimming, climbing, and other characteristics. What can you tell me about X-COM 3?

X-COM 3 is being largely re-written from scratch with a totally new tactical combat engine and a new strategic combat system. We are including all the game elements from the previous games—tactical combats, research, base construction, production, buying, selling, recruiting—but we are adding several new elements. First, there is a semi-real time

strategic combat system involving various types of vehicles. This part of the game is now complete and works quite well. Second, there is a sort of role-playing element with a large number of non-player characters who have their own objectives and influence within a futuristic megalopolis. The game is initially set in this megalopolis that is dominated by various corporations and other organizations.

The interface will be totally upgraded with "drag and drop" icons replacing tedious menu access. The tactical game will allow a much wider variety of actions including swimming, climbing, jumping, and crawling.

Will X-COM 3 be created in standard 320 × 200 VGA resolution, or will it support higher screen resolutions? (i.e., 640 × 480, 800 × 600)

The screen resolution will be 640 × 480 with 256 colors. This resolution is much better than standard VGA for detailed strategy games. Overall the graphics will be very impressive. X-COM 3 will be a CD-only product with video sequences for news reports and an extensive fully illustrated UFOpedia covering every aspect of the game world.

Will X-COM 3 offer multi-player support?

Definitely yes. I think this is a very important feature that we simply did not have time to implement in X-COM 1. The multi-player options will cope with networks, null modem, modem, and play based on one computer. In addition there will be a set of utilities to enable players to design tactical combat scenarios and maps.

What do you think will be the most impressive features of X-COM 3?

Flexibility and depth. Players should be able to play the game the way they want to. The tactical combat section will allow for turn-based play, real-time, and semi-real-time. The multi-player options and customizing utilities should add longevity to the game.

The tactical combat engine in X-COM seems ideal for use in other settings, such as a squad-level simulation of World War II, Korea, or Vietnam. Will the X-COM game engine be licensed to other developers to develop these types of games, or will MicroProse UK develop any and all products based on the X-COM game engine?

The system is easily adaptable to other games. MicroProse has licensed the X-COM system to use with X-COM 2. Anything we do in the future is, of course, open to negotiation but at the moment we are quite happy to work with MicroProse.

Successful games sometimes spawn an entire industry of their own (for example, DOOM). Will we be seeing any X-COM cartoons, T-shirts, movies, or other goodies?

There is a distinct possibility that there will be various spin-off products to accompany the range of games, but I don't know any details.

What does Mythos have in the works after X-COM 3?

We plan to develop multi-player on-line strategy games because this is the kind of game that I like. Telephone costs are still a bit prohibitive in Europe compared to America, but as communication costs fall and computer networks grow, on-line games will be a major growth area for the PC games market.

How did you and Nick get started in programming? How old where you when you decided to develop computer games for a living?

I was 18 when I got my first computer—a Sinclair ZX81—in 1982. I was already mad about board games and role playing games, so I was fascinated with the idea of using computers to play games. As soon as I got a Sinclair Spectrum, I started programming computer strategy games. I have being doing so until now apart from a break to go to college. I recruited Nick to help me with Laser Squad in 1988 after he left the university.

How did you and Nick split the programming duties for the original X-COM?

I did most of the design and interface programming and Nick handled the trickier bits such as the AI.

One of my favorite games for the Amiga was Laser Squad. Besides that product, what other games has Mythos developed?

Mythos was formed in 1988, after I had spent some time programming for Spectrum. Apart from Laser Squad, we developed a magical strategy game called Lords of Chaos, which did not see the light of day in America, as far as I know. My Spectrum games (Nebula, Chaos, Rebelstar I and II, Lords of Chaos, and Laser Squad) are available free on the PC using a Spectrum emulator (which is available via shareware).

What served as inspiration for X-COM? Any books, computer games, role-playing games, movies, or other sources you'd like to name?

The first inspiration was to continue developing the tactical combat system from my earlier games (Rebelstar and Laser Squad). We approached MicroProse with a demo on the ST and they said they wanted a "big" game, so we suggested adding a strategic aspect. It was Pete Moreland at MicroProse UK who suggested the theme of UFOs. We agreed that this was a great idea. I was already familiar with some of the UFO lore, and the film *Communion* was fascinating. I went out and acquired quite a few books on UFOology and used much of the material in the game.

What games do you enjoy playing besides X-COM?

Mostly I play board games and I have built up a fair collection from Avalon Hill, SPI, Games Workshop, and other publishers. I try not to play computer games too much, otherwise I would be spending nearly all my waking hours in front of a VDU. Our favorite recent computer games have been Masters of Orion, Transport Tycoon, Tie Fighter, Sim City 2000, and VGA Planets.

Speaking of games from another company, what products in the game industry impress you? Any specific companies or products you'd like to name?

Lucas Arts is impressive for producing generally good quality games and MicroProse for great strategy games. We were very impressed with VGA Planets because of the concept behind it.

After the success of DOOM, the programmers at id Software invested some of their hard-earned cash in such items as expensive sports cars and palatial homes. Have either you or Nick splurged on any exotic sports cars or castles in the English countryside recently?

No, we are investing most of the money into building a development team with better resources. I have bought a modest two bedroom apartment, and a hi-fi to replace my ghettoblaster (which was stolen from the office recently). Nick is going to buy a car. Unfortunately, there are not many habitable castles in England.

If you weren't programming games for Mythos, what would the two of you be doing for a living? Driving race cars? Working for the British Military? Running for prime minister?

I have always wanted to be either an artist, film director, or a writer. I am not sure what Nick would have done with his Economics degree.

If a young programmer asked you for advice on breaking into the game development biz, what would you tell him?

Nowadays it really helps to get a computer science degree—as long as the course covers C or C++ programming. There are also some computer graphics degrees worth looking at. Without a degree many companies need two or more years experience in the business. One way to get this experience is by developing some small scale shareware games, but it is a lot of effort to produce something viable with scarce resources.

What do you think of the debate over violence in computer games here in the States?

Most computer games involve some kind of representation of violence but recently the selling point of some games has been the graphic depiction of violence. As graphics become more sophisticated and realistic it is inevitable that they will be subject to the same kind of classification as films. The British Board of Film Censors already looks at computer games because of the recent Criminal Justice Act which requires any game containing video style footage (whether generated by real actors or not) to be classified. The European industry now has a voluntary classification system. Personally, I support guidelines but not censorship. Violence does not automatically make a good game, and I am more concerned about the quality of games as we move into the so-called "interactive multimedia" age.

APPENDIX

Barracuda: The most basic interceptor craft available to X-COM, and the only interceptor available at the start of the game. Although not the fastest or most well armored craft, the Barracuda will still perform the vast majority of alien USO interception and patrol duties. The Barracuda has two weapon pods.

Battlescape: The three-dimensional display that is used whenever soldiers are directly engaged in combat with the aliens. Using the Battlescape screen you can "micro-manage" the actions of each and every individual TFTD soldier.

Geoscape: Considered the "main menu" of TFTD. Consists of two main parts: a 3D Geoscape view of the Earth, and a strip of control buttons on the right edge of the screen.

Hammerhead: The first new transport craft developed using captured alien technology. Although the Hammerhead is fast and well armored, it only supports one weapon pod and can only carry twelve soldiers. It also cannot carry any SWS platforms.

Leviathan: The finest craft that X-COM can produce. A synergistic fusion of the best in alien and earth-based technologies, the Leviathan is the only transport able to descend to the crushing ocean depths where the ancient alien city of T'leth lies. Extremely fast, well armored, and with a huge cargo capacity, the Leviathan is without equal.

Manta: An X-COM interceptor craft that uses Zrbite for fuel. The Manta is the fastest X-COM craft in the game (with the sole exception of the Leviathan).

M.C.: An abbreviation for "Molecular Control." See the glossary entry on *Molecular Control.*

Molecular Control: Analogous to the "Psionics" found in the original X-COM, molecular control is comparable to a powerful form of ESP. Using molecular control, aliens and well trained aquanauts can attempt to assume control of enemy units and/or cause them to flee, panic, or go berserk. The Great Alien supposedly uses molecular control as part of a vast communications network that it uses to direct the actions of its minions.

SWS: An abbreviation for "Submersible Weapons System." Submersible weapon systems are computer-controlled fighting vehicles that can be sent into battle alongside X-COM troopers.

Synomium Device: Located in the control room of Alien colonies and artifact sites, the Synomium Device serves as a sort of communications link to connect the base to the Great Alien's vast molecular control communications network. The player's primary goal in alien artifact sites and alien colonies is to destroy this device.

T'leth: Not to be confused with R'lyeh, author H.P. Lovecraft's ancient city at the heart of his Cthulhu mythos. T'leth is the ancient alien city that houses the Great Alien, the mastermind behind the alien conquest of the Earth.

TFTD: An abbreviation for the game X-COM: Terror From The Deep.

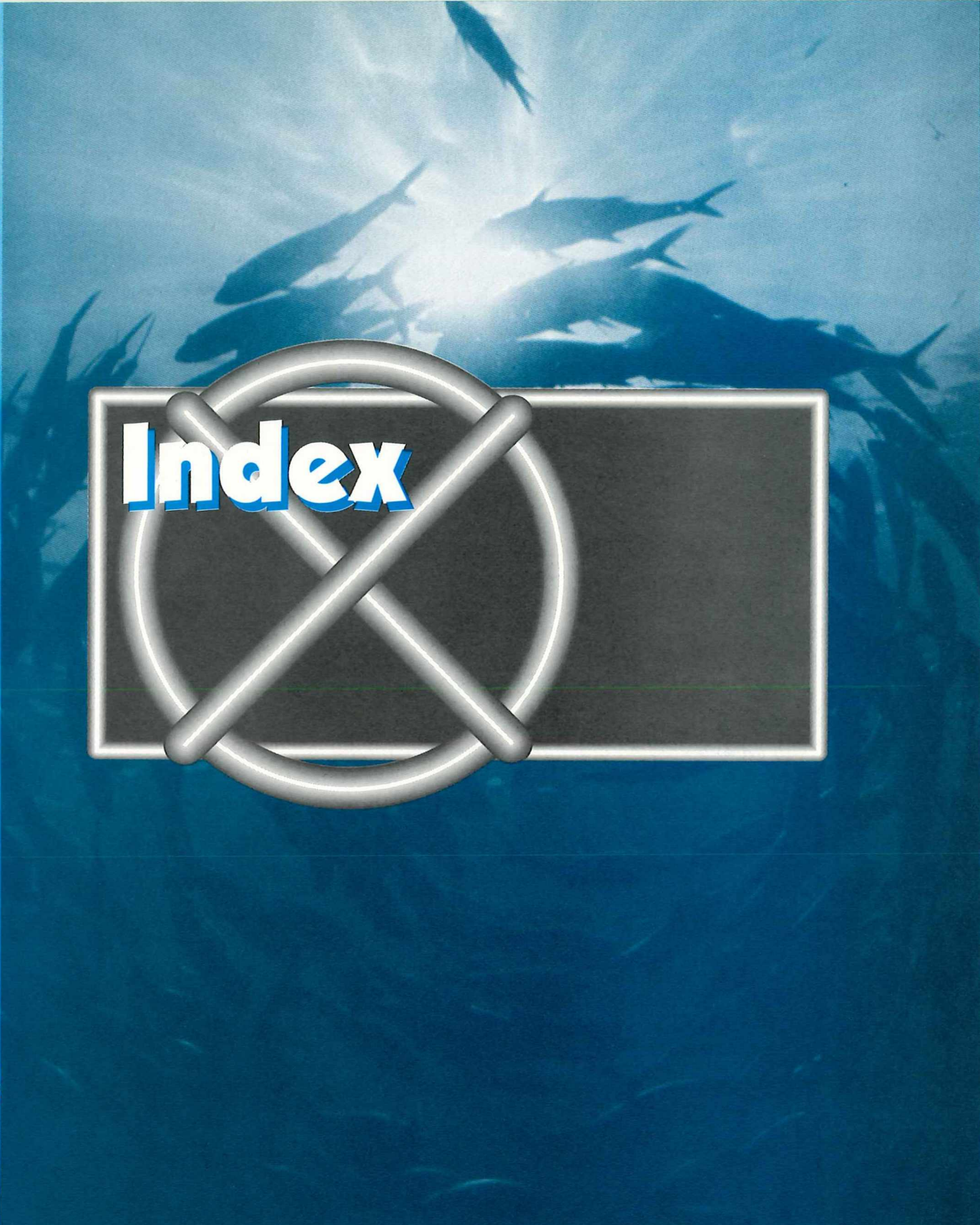
Triton: The most basic transport craft available to X-COM. Slow and unarmed, the Triton is nevertheless the most important transport craft available to X-COM. The vast majority of combat missions will involve the use of a Triton as a troop transporter.

TU: An abbreviation for the soldier ability score "Time Units." The more time units a soldier has, the more actions he can undertake during his turn.

UFOpedia: An on-line encyclopedia that records the results of successful research and provides information about the entire gamut of X-COM craft, equipment, and weaponry. The UFOpedia can be accessed by clicking on the UFOPEDIA button found on the Geoscape screen.

USO: An abbreviation used for "Unidentified Submersible Object." Most commonly used when referring to alien flying submarines.

Zrbite: An advanced alien alloy, this wonder metal is the "secret ingredient" behind some of the most powerful equipment and vehicles in the game. Unable to be manufactured on Earth, Zrbite can only be obtained by removing it from alien USOs.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